

PAC5



2005 Particle Accelerator Conference

Conference Guide



OAK RIDGE
NATIONAL LABORATORY

Jefferson Lab

SNS



2005 Particle Accelerator Conference

May 16-20, 2005

**Knoxville Convention Center
Knoxville, Tennessee, USA**

www.sns.gov/pac05/

Hosted by:

Oak Ridge National Laboratory/Spallation Neutron Source

managed by UT-Battelle, LLC, under contract DE-AC05-00OR22725
for the U.S. Department of Energy

Thomas Jefferson National Accelerator Facility

managed by Southeastern Universities Research Association
for the U.S. Department of Energy

Acknowledgments

The PAC05 Organizing Committee, Scientific Program Committee, and Local Organizing Committee would like to acknowledge and thank the following for their sponsorship and support:

American Physical Society,
Division of Physics of Beams
Institute of Electrical and Electronics Engineers,
Nuclear and Plasma Sciences Society

National Science Foundation
U.S. Department of Energy

Oak Ridge National Laboratory
Thomas Jefferson National Accelerator Facility

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Welcome to PAC05 on behalf of the American Physical Society (APS), the Institute of Electrical and Electronics Engineers (IEEE), with its subdivision of the Nuclear and Plasma Sciences Society (NPSS), and the organizing committees. We thank you, as part of the global community, for your suggestions that have contributed to an exciting PAC05 program.



Norbert Holtkamp



Swapan
Chattopadhyay

As an official World Year of Physics (WYOP) event, PAC05 has planned several WYOP events. The Scientific Program includes a special Einstein Session, where world-renowned scientists will speak about the mysteries of cosmic acceleration, dark energy and matter, symmetries in the subatomic world, and the elusive world of neutrinos. In addition, both plenary sessions will include presentations by distinguished world leaders in science and technology, including opening remarks by Phil Bredesen, honorable Governor of Tennessee—and a one-time physicist by profession.

We've also planned two special WYOP evening events. On Tuesday is "Science and Music." Violinist Jack Liebeck and pianist Inon Barnatan will present a concert tailored to this event and introduced by our colleague Brian Foster, a particle physicist from the University of Oxford. On Wednesday is "Einstein in the City." Open to the citizens of Knoxville, this fun event will include a variety of activities to commemorate Einstein's outstanding contributions.

In closing, thank you again for participating in this significant event and for making it a success. This is a gala celebration—let the beam-fest begin!

**Norbert Holtkamp, ORNL/SNS
PAC05 Conference Chair**

**Swapan Chattopadhyay, JLab
Scientific Program Chair**

Organizing Committee

Norbert Holtkamp, ORNL/SNS, Chair

Swapan Chattopadhyay, JLab, Scientific Program
Chair

Ilan Ben-Zvi, BNL, IEEE/NPSS Liaison

Bruce C. Brown, Fermilab, IEEE/NPSS Liaison*

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John Galayda, SLAC

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Vladimir Shiltsev, Fermilab

Robert Siemann, SLAC

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Alan Todd, AES

Thomas Wangler, LANL

Bill Weng, BNL

Glen A. Westenskow, LLNL

Marion M. White, ANL

*Thanks to Bruce Brown for serving on the committee through January 1 of this year.

Local Organizing Committee

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Kathy Rosenbalm, ORNL/SNS, Conference
Coordinator

Janet Bivens, ORNL/SNS, Finance

Dan Ciarlette, ORNL/SNS, Information Technology

Craig Deibebe, ORNL/SNS, Industrial Exhibits

Al Ekkebus, ORNL/SNS, Tours

Kelly Hanifan, JLab, Scientific Program

Charlie Horak, ORNL/SNS, Publications & Web

Ann Jordan, ORNL/SNS, Registration

Doris Shubert, ORNL/SNS, Satellite Meetings
Loretta Simpson, ORNL/SNS, Hospitality
Sherry Thomas, JLab, Scientific Program

*Special thanks to Angie Beach, ORNL Conference Office, for her invaluable assistance.

Scientific Program Committee

Swapan Chattopadhyay, JLab, Chair
Gerry Dugan, Cornell University, Vice-Chair
Caterina Biscari, INFN/LNF, EPAC Representative
S. Kurokawa, KEK, APAC Representative

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R. Bhandari, VECC
J. Bisognano, UW-Madison/SRC
H. Bluem, AES
P. Bricault, TRIUMF
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M. Champion, ORNL/SNS
D. Chan, LANL
Y. Chen, LLNL
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M. deJong, CLS
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G. Jackson, Hbar-Technologies, Inc.
A. Jason, LANL
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T. Katsouleas, USC
R. Keller, LBNL

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P. Krejcik, SLAC
N. Solyak, Fermilab
E. Lee, LBNL
S.Y. Lee, IUCF
A. Lumpkin, ANL
F. Marti, MSU
L. Merminga, JLab
A. Mishin, AS&E
J. Murphy, BNL
W. Namkung, POSTECH
K. Nielson, LANL
W. Oren, JLab
P. O'Shea, IREAP
H. Padamsee, Cornell University
F. Pilat, BNL
M. Poole, CCLRC/DL
C. Prior, RAL
T. Raubenheimer, SLAC
D. Rice, Cornell University
L. Rivkin, PSI
D. Robin, LBNL
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R. Ruth, SLAC
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R. Sheffield, LANL
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C. Sinclair, Cornell University
I. Smith, TPSD
N. Solyak, Fermilab
P. Stoltz, Tech-X
B. Strauss, DOE
D. Sutter, DOE
S. Tantawi, SLAC
P. Wanderer, BNL
R. Webber, Fermilab
J. Wei, BNL
U. Wienands, SLAC
G. J. Wurtele, UCB
Y. Yamazaki, JAERI
A. Zhang, BNL
F. Zimmermann, CERN

Venue

Knoxville Convention Center (KCC)

www.kccsmg.com

701 Henley Street

Knoxville, TN, USA 37902

Phone: 865-KCC-KNOX (522-5669)

Fax: 865-329-0422

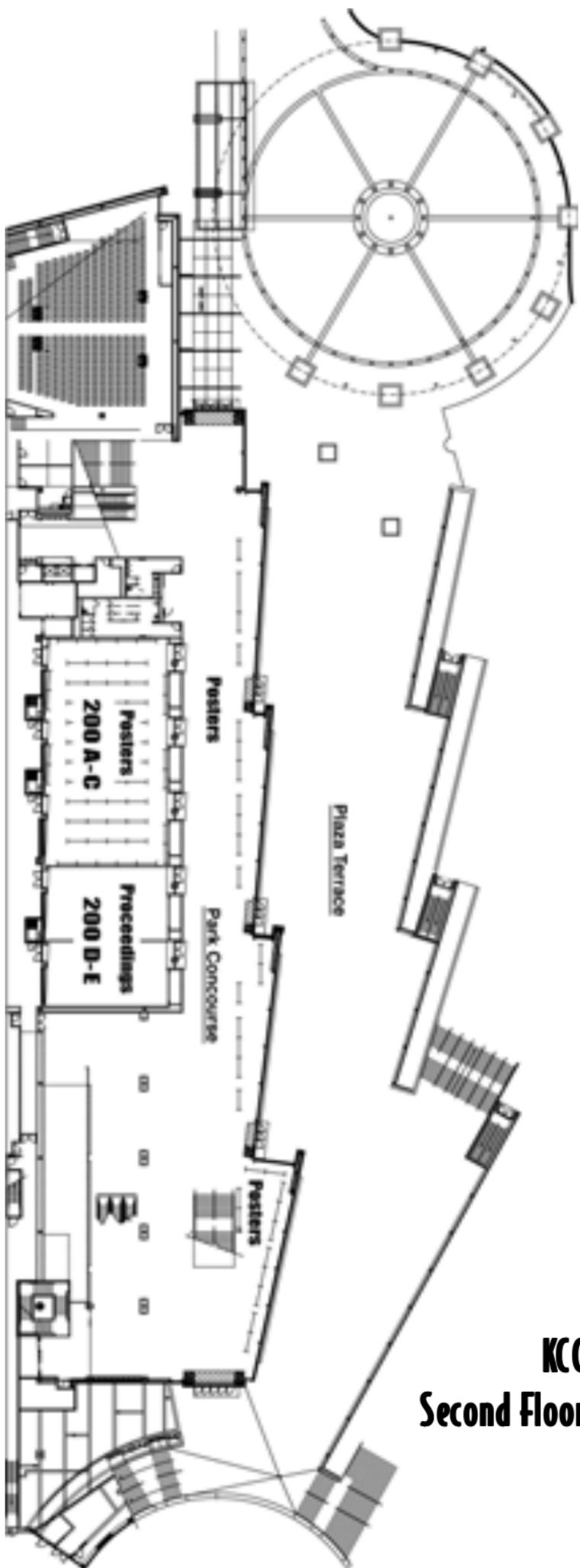
Mailing Address:

P.O. Box 2543

Knoxville, TN, USA 37901-2543

KCC Third Floor





KCC
Second Floor

Transportation During the Conference

The Knoxville Trolley Service will provide *free* transportation to and from the downtown hotels, restaurants, and the KCC. A schedule is provided in your conference portfolio. More details and schedules are also available online at www.ci.knoxville.tn.us/kat/web%20pages/Trolley/Trolley_Main.asp.

In addition, public buses run in the downtown and surrounding areas. For more information, see www.ci.knoxville.tn.us/kat/web%20pages/home.asp. Limited taxi service is also available in the downtown area.

Registration

Registration is located on the third floor in Rooms 301 D & E (off the Henley Concourse). Registration hours are

Sunday	5:00 p.m. to 9:30 p.m.
Mon.-Thur.	7:30 a.m. to 5:00 p.m.

A message board is located near the registration desk.

Your registration fee includes attendance at all technical sessions of the conference, coffee breaks, conference guidebook, abstract book (on USB memory stick), and one copy of the proceedings on CD-ROM. All receptions and the conference banquet are being sponsored by nonfederal sources. Hard copies of the proceedings may be purchased from IEEE at an estimated cost of \$300.

The fee for registration after March 18 is \$495 (U.S. dollars). For participants whose registration fees have not been paid in full, payment may be made at the registration desk by credit card, check, or cash. Registration fees of \$125 for one day and of \$70 for students and retirees are also available.

Attendees are requested to wear their conference badges at all PAC-sponsored events. If you need assistance, please ask anyone wearing a badge with a red stripe (Local Organizing Committee staff).

Internet Café

An e-mail room is located in Room 301C, off the Henley Concourse. It contains laptops, a black & white printer, and wireless access. Hours are

Sunday	5:00-7:00 p.m.
Monday	12:30-6:00 p.m.
Tuesday	8:00-6:00 p.m.
Wednesday	8:00-6:00 p.m.
Thursday	8:00-6:00 p.m.
Friday	8:00-1:00 p.m.

The Internet Café also includes an area where speakers can preview/test their presentations. *Please note that all speakers must give their presentations with the computer systems set up in the ballrooms. Use of individual laptops cannot be accommodated.*

Proceedings Office

The Proceedings Office is located in Rooms 200 D & E, off the Park Concourse on the second floor. The editorial staff will process papers before and during the conference.

The paper submission deadline was Wednesday, May 11. Authors are requested to come by the Proceedings Office to check on their papers via the status board that will be located in or near the Proceedings Office.

Authors are requested to bring a hard copy of their paper and a signed IEEE copyright form to the Proceedings Office as soon as possible upon arrival at the conference. *A copyright form must be turned in before a paper can be accepted for publication.* Forms are available in the Proceedings Office and at www.sns.gov/pac05/ieee_copyright.shtml.

Proceedings Office hours:

Sunday	5:00-7:00 p.m.
Monday	8:00-6:00 p.m.
Tuesday	8:00-6:00 p.m.
Wednesday	8:00-6:00 p.m.
Thursday	8:00-6:00 p.m.
Friday	8:00-1:00 p.m.

The conference proceedings will be published on CD-ROM and on the Joint Accelerator Conferences Web Site (JACoW) at accelconf.web.cern.ch/accelconf/. Hard copies will be available only from IEEE at an estimated cost of \$300 per copy.

A selected set of papers, based on papers submitted to PAC05, will appear in a special edition of *Physical Review Special Topics—Accelerators and Beams* (PRST-AB), a peer-reviewed journal published by the APS.

Industrial Exhibits

The industrial exhibits hours are

Monday	8:30-6:00 p.m.
Tuesday	8:00-6:00 p.m.
Wednesday	8:00-6:00 p.m.

Exhibitors registered at press time:

Accel Instruments GmBH
AccelSoft Inc.
Acqiris
Advanced Design Consulting USA, Inc.
Advanced Energy Systems Inc.
ADVENT Research Materials Limited
AFT Inc.
American Magnetics, Inc.
American Technical Services
Amuneal Manufacturing Corporation
A&N Corporation
ATK Mission Research
Bergoz Instrumentation
Bruker Biospin SA
Burle Industries, Inc.
CAEN Technologies
Ceramic Magnetics
CeramTec North America Corp.
CML Engineering
Communications and Power Industries, Inc.
Cryofab Inc.
CST of America
Danfysik A/S
Diversified Technologies
e2v Technologies Inc.
Energen, Inc.

Everson Tesla, Inc.
The Ferrite Company
FMB Feinwerk-und Messtechnik GmbH
Framework Scientific
Gamma Vacuum, LLC
GMW Associates
Goodfellow Corporation
H. C. Starck Inc.
Heatwave Labs
IE Power Inc.
Instrumentation Technologies
Kurt J. Lesker Company
L-3 Communications Electron Devices
Linde BOC Process Plants LLC
Mega Industries, LLC
Meyer Tool & Manufacturing, Inc.
Microwave Amplifiers Ltd.
OCEM S. p. A.
Pearson Electronics
PHPK Technologies
QEI Corporation
SAES Getters USA, Inc.
Scanditronix Magnet AB
SDMS
SIGMAPHI
Simulation Technology & Applied Research
Struck Innovative Systeme GmbH
Tektronix
Thales
Titan Pulse Sciences Division
Toshiba Electron Tubes & Devices Co., Ltd
VAT Inc.
Vector Fields Inc.
Wah Chang
Wiener, Plein & Baus, Ltd.
Windels Timm Morgen
UMA Group

A complete listing of exhibitors is also on the web at
www.sns.gov/pac05/exhibitor_list.shtml.

Special Events

Sunday Welcome Reception

A welcome reception will be held outside on the KCC Plaza Terrace from 6:30 to 9:30 p.m. In case of rain, the reception will be held at the corner of the Henley and Cumberland concourses (third floor). All registrants are invited.

Tuesday Special Events

Meet the Editors of *Physical Review* and *Physical Review Letters*
2:30-4:30 p.m., Cumberland Concourse

WYOP/Einstein Special Event: Science and Music
6:00-7:45 p.m., Ballrooms D, F, & G

(Please see pages 16-17 for more information. An invitation with the evening's program is included in your conference bag.)

Wednesday Special Events

The 100th anniversary of Einstein's three important contributions will be honored in several World Year of Physics conference activities.

Live Radio Broadcast

Hallerin Hilton Hill will broadcast his morning talk show on WNOX (FM 99.1, 99.3, and AM 990) from the conference site, 6:00-10:00 a.m.

High School Physics Teachers' Day

This all-day seminar will present an opportunity for local physics teachers to learn more about particle accelerators and Einstein's contributions to this field.

Special Session: Accelerator Science and Technology Awards
1:00-3:00 p.m., Ballrooms D-G

Chaired by Nan Phinney (SLAC), this special session will include an awards ceremony, sponsored by the APS Division of Physics of Beams (DPB) and the IEEE/NPSS, to present the following awards and prizes:

- APS Robert R. Wilson Prize
- APS Award for Outstanding Doctoral Thesis Research in Beam Physics
- IEEE/NPSS Particle Accelerator Science and Technology Awards (presented by Ilan Ben-Zvi, BNL)
- U.S. Particle Accelerator School Prize (USPAS) for Achievement in Accelerator Physics and Technology (presented by Helmut Wiedemna, USPAS)
- Announcement of newly elected APS fellows
- Student Travel Awards

Along with presentation of the prizes, the session will be devoted to talks by winners of the APS/DPB, IEEE/NPSS, and USPAS awards.

Special Session: "Einstein and the World Year of Physics"

3:00-5:55 p.m., Ballrooms D-G

Jointly sponsored by PAC, EPAC, and APAC.

Chaired by Bill Madia (Battelle), former director of ORNL, this special session will feature the following presentations:

- Introduction: Einstein's Legacy in Charged Particle Acceleration, *S. Chattopadhyay (JLab)*
- Einstein and Cosmic Acceleration, *Michael Turner (NSF)*
- Symmetries and Einstein, *Makoto Kobayashi (KEK)*
- Neutrinos and Einstein, *Yoichiro Suzuki (University of Tokyo)*
- The Quest for Dark Matter, *Carlo Rubbia (CERN)*

"Einstein in the City" Celebration

6:00-9:00 p.m., World's Fair Park

Sponsored by the city of Knoxville. *Conference badge required for entry.*

This event will be an opportunity for the public to celebrate and learn more about Einstein's legacy alongside the conference attendees. In addition to food and drinks from local restaurants and live entertainment, planned events include a science fair for local high school students, live demonstrations, children's activities, and a science discussion chaired by Bill Madia.

WYOP/Einstein Special Event: Science and Music, 6:00-7:45 p.m., Ballrooms D, F, & G

Jack Liebeck and Inon Barnatan will present an evening of violin and piano music, introduced by Brian Foster.

Master of Ceremonies: S. Chattopadhyay (JLab).



Jack Liebeck
was born in 1980 in London. He attended the Purcell School of Music and then the Royal Academy of Music. His first public appearance was at the age of 10 for BBC television.

Performing in concertos and recitals since the age of 11, Jack's appearances have taken him all over the world to perform with many world-renowned orchestras and conductors. His debut disc on the new *Quartz* label was released in July 2004 to enormous critical acclaim, becoming CD of the Week in a UK national newspaper and earning him praise as "...one of the most accomplished violinists of his generation...."

Planned appearances for this season include concertos and recitals in Armenia, France, Germany, Israel, Japan, Korea, Portugal, Switzerland, the UK, and the United States.

Jack plays the "Ex-Wilhelmj" Guadagnini, dated 1785. For more details, go to www.jackliebeck.com.

Photo courtesy of Tim Meara



Israeli pianist **Inon Barnatan** started playing the piano at the age of 4 and entered the Tel Aviv Conservatory a year later. He made his orchestral debut at the age of 11 and in the following years won many national prizes, playing throughout Israel. In 1997 he moved to London to study at the Royal Academy of Music.

Inon has performed in concerts all over the world, and his name is attached to a lengthy list of awards and prizes. His CD, a live, all-Beethoven recital, has been named CD Discovery of the Month in the October 2002 issue of *Classica Magazine*.

In the 2003-04 season, Inon gave his debut recital at Carnegie Hall in New York, among other appearances in the United States. He will also be returning to venues throughout Europe, the United States, and Africa.

Photo courtesy of Rita Castle

Professor Brian Foster is an internationally recognized particle physicist. He is a Fellow of Balliol College in the University of Oxford and heads the European Committee for Future Accelerators. Professor Foster loves music and, like Albert Einstein, is a keen amateur violinist. In celebration of the Einstein year, he has collaborated with Jack Liebeck in a performance titled “Superstrings,” which explains and illustrates through lecture and the violin—Einstein’s favorite instrument—the concept of superstring theory.



Photo courtesy of Jack Liebeck

Thursday Special Events

Gala Dinner

7:00-10:00 p.m., KCC Plaza Terrace

Entertainment will be provided by the Rocky Wynder Jazz Trio.

Saturday Special Events

Tour of the SNS Site – Reservations Required

The Spallation Neutron Source (SNS) is a new, accelerator-based science facility that will provide neutron beams with up to ten times more intensity than any other source in the world. This motorcoach tour will depart from the KCC at 9:00 a.m. and will return to the KCC after lunch. The tour will include an overview of the SNS project, including the specific components of the front end, klystron gallery, linear accelerator, accumulator ring, and target facility. Industrial vendors will be positioned near their equipment to answer questions and provide additional information.

Cost for the tour, including transportation and lunch, is \$15. You must preregister for this tour; please see registration staff for more information.

Security and Insurance

Participants are asked not to leave their belongings unattended and to wear their conference badges at all PAC05-sponsored events. The conference organizers cannot accept liability for personal injuries sustained or for loss or damage to participants' (or companions') personal property during the conference.

Companion Programs

Companion tours are available during and after the conference and are being handled by Knoxville Tourism and Sports Corporation. Pickup points for the companion tours will be at the four downtown hotels (Hilton, Holiday Inn Select, Marriott, and Radisson) and the Holiday Inn at Papermill Road.

Activities during the conference:

Monday

“Welcome to Knoxville” Continental Breakfast
Hilton Hotel, 8:30-9:30 a.m.

Historic Knoxville City Tour

9:30 a.m.-4:30 p.m.

Tuesday

A Step Back in Time

8:30 a.m.-4:30 p.m.

Wednesday

A Day in Old Appalachia

8:30 a.m.-3:30 p.m.

Thursday

A Day at Dollywood and Pigeon Forge Outlets

8:30 a.m.-4:30 p.m.

Friday

Wild Mountain Tour

8:30 a.m.-4:30 p.m.

Saturday

Secret City Tour

9:00 a.m.-3:30 p.m.

More information is available on the web at
www.sns.gov/pac05/tours.shtml.

Accelerator Prizes

2005 APS Robert R. Wilson Prize

To recognize and encourage outstanding achievement in the physics of particle accelerators—a prize of the American Physical Society sponsored by the APS Divisions of Physics of Beams and Particles and Fields and the friends of R. R. Wilson.



Awarded to: Keith Randolph Symon, University of Wisconsin

“For fundamental contributions to accelerator science including the FFAG concept and the invention of the RF phase manipulation technique that was essential to the success of the ISR and all subsequent hadron colliders.”

APS Award for Outstanding Doctoral Thesis Research in Beam Physics

To recognize doctoral thesis research of outstanding quality and achievement in beam physics and engineering. The award was established in 1990 by the Division of Physics of Beams and is supported by Brookhaven Science Associates and Universities Research Association.

Awarded to: Dr. Eduard Pozdnyev, Thomas Jefferson National Accelerator Facility/
Michigan State University



“For pioneering research on space charge effects of beams in the isochronous regime, including simulations and experimental verification following the design and construction of the Small Isochronous Ring.”

His thesis: *CYCO and SIR: New Tools for Numerical and Experimental Studies of Space Charge Effects in the Isochronous Regime*. Submitted to Michigan State University, Department of Physics and As-

tronomy, 2003. Thesis Supervisor: Dr. Felix Marti, Michigan State University.

IEEE NPSS Particle Accelerator Science and Technology Award

Awards of the Particle Accelerator Conference given on behalf of the Nuclear and Plasma Sciences Society of the IEEE and sponsored by the NPSS. Two awards are given to recognize outstanding contributions to the development of particle accelerator technology.



Awarded to: **Ronald Davidson**,
Plasma Physics Laboratory,
Princeton University

“For pioneering contributions to the theory of charged particle beams with intense self fields, including fundamental studies of nonlinear dynamics and collective processes.”

Awarded to: **Thomas Roser**,
Brookhaven National
Laboratory

“For pioneering scientific work and introduction of new technology in the acceleration, storage and collision of polarized protons in the high energy collider RHIC.”



U.S. Particle Accelerator School Prize for Achievement in Accelerator Physics and Technology

The U.S. Particle Accelerator School honors individuals by recognizing their outstanding achievements over the full range of accelerator physics and technology. The awards are made possible by donations from the Brookhaven Science Associates, Southeastern Universities Research Association, the Universities Research Association, and John Wiley and Sons Publishers.



Awarded to: **Wim Leemans**,
Lawrence Berkeley National
Laboratory

“For his contributions to the developments of laser wakefield accelerators, in particular the guiding of high-intensity laser beams and acceleration to high-energy of high-quality electron beams.”

Awarded to: **Anton Piwinski**,
Deutsches Elektronen Synchrotron

“For his fundamental contribution to the understanding of charged particle beams in circular accelerators, in particular of intra-beam scattering, beam-beam effects and synchro-betatron resonances.”



Newly Elected IEEE/NPSS Fellows Relevant to the Field of Accelerators

Patrick G. O’Shea, University of Maryland

“For contributions to charged particle accelerators and free-electron lasers.”

Bruce Paul Strauss, U.S. Department of Energy

“For leadership in low temperature superconducting materials and magnet systems.”

Stanley O. Scharber, Michigan State University

“For contributions to linear accelerator technology.”

Wu-Tsung (Bill) Weng, Brookhaven National Laboratory

“For leadership in particle accelerator development.”

Newly Elected APS/DPB Fellows

At the November 2004 APS Council Meeting, the following list of 2005 DPB Fellows was approved:

David H. Rice, Cornell University

“For his key role in conception and implementation of pioneering accelerator physics innovations in electron-positron colliders and storage rings.”

Leonid Rivkin, Paul Scherrer Institute

“For his scientific contribution and technical leadership role in the design and construction of accelerators for high energy physics and synchrotron light sources, and for furthering our understanding of beam instabilities.”

Michael James Syphers, Fermi National Accelerator Laboratory

“For his contributions to non-linear beam dynamics and beam optics design, and to education in accelerator physics.”

Jonathan Syrkin Wurtele, University of California-Berkeley

“For his many theoretical contributions to free electron lasers, laser-plasma acceleration, laser-plasma interactions, and muon beam manipulations.”

Victor A. Yarba, Fermi National Accelerator Laboratory

“For his technical leadership of frontier accelerator projects in Russia and the U.S. and for fostering international collaborations.”

Li-Hua Yu, Brookhaven National Laboratory

“For creative contributions to the theory of self-amplified spontaneous emissions and high-gain harmonic-generation, and the experimental demonstration of the high-gain harmonic-generation free-electron laser.”

Frank Zimmermann, European Organization for Nuclear Research

“For many theoretical and experimental contributions to accelerator physics including the study of beam-ion and beam-electron cloud interactions, collective instabilities, nonlinear optics, and beam measurements.”

Student Travel Awards

The National Science Foundation, APS/DPB, and IEEE/NPSS have sponsored grants to worthy students to help defray their travel costs. These grants are being awarded in honor of two people who have made many contributions to the accelerator community. The APS/DPB grants honor Mel Month for his dedication to students and education, and the IEEE/NPSS grants honor Lou Costrell for his nurturing of the particle accelerator conferences. The awards include a complimentary one-year student membership in the sponsoring professional society. Awards were made to the following students:

Natalia Abreu, LNLS
Gerard Andonian, UCLA
Lucrezia Auditore, Messina/INFN
Gang Bai, IREAP
Christopher Barnes, SLAC
Elena Benedetto, CERN
Dmitry Berkaev, BINP
Ronak Bhatt, MIT
Alexander Brandt, DESY
Stephen Brooks, CCLRC/RAL/ASTeC
Rama Calaga, BNL
Xiangyun Chang, BNL
Gianluigi Clemente, IAP
Alan Cook, UCLA
Michel Covo, LBNL
Benjamin Cowan, SLAC
Rodion Dostovalov, BINP
Illya Drebot, NSC/KIPT
Michael Dunning, UCLA
Peder Eliasson, CERN
Umberto Emanuele, Messina/INFN
Robert England, UCLA
Christof Gabor, IAP

Yue Hao, IUCF
Dazhang Huang, ANL
Dharmaraj Indurthy, University of Texas at Austin
Chunguang Jing, ANL
Davit Kalantaryan, CANDLE
Vasily Kvardakov, BINP
Fanglei Lin, BNL
Augusta Loftsdottir, LBNL/ALS
Javier Lopez, CERN
Roark Marsh, MIT
Nathan Moody, IREAP
Boaz Nash, SLAC
Jia Ning, Fermilab
Caolionn O'Connell, SLAC
Jaroslaw Pasternak, CERN
Tatiana Pieloni, CERN
Sakhorn Rimjaem, FNRF
Guillaume Robert-Demolaize, CERN
Federico Roncarolo, CERN
Taku Saito, RISE
Nicholas Sammut, CERN
Ksenia Samokhvalova, MIT
Christopher Sears, SLAC
Lei Shao, UCLA
Garegin Simonyan, YSU
Jeffrey Smith, Cornell University
Giovanni Spiezio, CERN
Bastien Steiner, TEMF
Ralph Steinhagen, CERN
Yingmei Su, BNL
Yin-e Sun, Fermilab
Christopher Tennant, JLab
Kai Tian, IREAP
Rodion Tikhoplov, Fermilab
Jeremy Urban, Cornell University
Nikita Vasyukhin, FZJ/IKP
Fei Wang, IUCF
Haitao Wang, ANL
Stephen Weathersby, SLAC
Emma Wooldridge, CCLRC/DL/ASTeC
Qiong Wu, IUCF
Lingyun Yang, IUCF
Phil Sung Yoon, Fermilab
Davit Zakaryan, YSU
Kai Zheng, NSRL
Jing Zhou, MIT
Robert Zwaska, Fermilab

Satellite Meetings

Sunday, May 15

DPB Executive Committee Meeting, 5:00-11:00 p.m., Room 301A

Monday, May 16

2006 Advanced Accelerator Concepts Workshop Organizing Committee Meeting, 1:00-5:00 p.m., Room 300C

International Conference on RF Superconductivity Program Committee Meeting, 6:00-7:30 p.m., Room 300B

ICFA Beam Dynamics Panel Meeting, 6:00-8:00 p.m., Room 301A

Tuesday, May 17

Code Benchmarkers Group Meeting, 11:00 a.m.-12:00 p.m., Room 301A

PAC05 Organizing Committee Luncheon Meeting, 12:50-1:20 p.m., Rotunda Boardroom (invitation only)

Meet the Editors of *Physical Review* and *Physical Review Letters*, 2:30-4:30 p.m., Cumberland Concourse

DPB Business Meeting, Room 301A, 5:30-6:30 p.m.

Wednesday, May 18

High School Physics Teachers' Day, 8:00 a.m.-4:00 p.m., Rooms 300 C&D

BIW06 Organizing Committee Meeting, 11:30 a.m.-1:00 p.m., Room TBD (invitation only)

Physical Review Special Topics—Accelerators and Beams Editorial Board Meeting, 12:30-2:30 p.m., Rotunda Boardroom (invitation only)

**Magnet Simulations for Particle Accelerators
Workshop**, 1:50-6:30 p.m., Room 300A (day 1)

Thursday, May 19

JACoW Steering Committee Meeting, 12:00 to 2:00 p.m., Rotunda Boardroom (invitation only)

LINAC06 OC Meeting, 12:30-2:30 p.m., Room 301A (invitation only)

**Magnet Simulations for Particle Accelerators
Workshop**, 1:50-6:30 p.m., Room 300A (day 2)

Friday, May 20

PACCC Meeting, 12:00-1:30 p.m., Rotunda Boardroom (invitation only)

Scientific Program

The schedule included here details the scientific program with the program code, title, and authors of each paper (only publicly available information will be discussed). An electronic version of the *PAC05 Abstract Book*, with the full text of the abstracts submitted, is provided on the USB pen included with your registration package.

Oral Sessions

Oral sessions will be held in the third floor ballrooms. Plenary sessions will be in Ballrooms D-G. Parallel sessions will be in Ballrooms A, B, and C.

A preview/testing area is available for speakers in the Internet Café. *Please note that all speakers must give their presentations from the computer systems set up in the ballrooms. Use of individual laptops cannot be accommodated.*

Poster Sessions

Poster sessions will be held in three areas:

Ballroom E (third floor)
Park Concourse (second floor)
Rooms 200 A-C (second floor)

Posters should be in place by the beginning of the session and should be taken down at the end of each session.

Authors are reminded that no contributions are accepted for publication only. Any paper accepted for presentation that is not presented at the conference will be excluded from the proceedings.

The Scientific Program Committee reserves the right to refuse papers for publication that have not been properly presented or staffed in the poster sessions. Manuscripts of contributions to the proceedings (or enlargements of them) are not considered to be posters, and papers presented in this way will not be accepted for publication.

Identification of Contributions

The date, type of presentation, and location for each contribution in the program can be easily identified from the program code, which is composed as follows:

- The first letter indicates the day: M, T, W, R, F.
- The second letter indicates presentation type: O for oral, P for poster.
- The third letter indicates time of day: A for a.m., P for p.m.
- The fourth letter indicates the location:

Oral Sessions (third floor)

- A Ballroom A
- B Ballroom B
- C Ballroom C
- D Ballroom A, B, or C (check program schedule for exact room)
- E Ballroom A, B, or C (check program schedule for exact room)

Note: All plenary and special sessions will be held in Ballrooms D-G.

Poster Sessions (second and third floor)

- E Ballroom E (third floor)
- P Park Concourse (second floor)
- T Rooms 200 A-C (second floor)

Monday, May 16

8:30-12:20	Opening Plenary	Ballrooms D-G
13:50- 17:20 Monday Afternoon Oral Sessions	High-Energy Hadron Accelerators and Colliders Sources and Injectors	Ballroom A
	Multiparticle Beam Dynamics	Ballroom C
13:50 17:10 Monday Afternoon Poster Sessions	Single-Particle Beam Dynamics and Optics Instabilities and Feedback Magnets	Ballroom E Park Concourse Rooms 200 A-C

Tuesday Morning, May 17

8:30- 12:25 Tuesday Morning Oral Sessions	Magnets Light Sources and Free- Electron Lasers Instabilities and Feedback Instrumentation	Ballroom A Ballroom B Ballroom C
8:30- 12:20 Tuesday Morning Poster Sessions	Advanced Concepts High-Energy Hadron Accelerators and Colliders	Ballroom E Park Concourse Rooms 200 A-C
	Multiparticle Beam Dynamics, Extreme Beams, & High-Energy Hadron Accelerators and Colliders	Rooms 200 A-C

Tuesday Afternoon, May 17

13:50-	Advanced	Ballroom A
17:35	Concepts	
Tuesday Afternoon Oral Sessions	<u>Light Sources and Free- Electron Lasers</u>	Ballroom B
	<u>Development in the South, East, and Mid- East/Nuclear Physics High- Energy Physics</u>	
	<u>Instrumentation</u>	Ballroom C
	<u>Linear Colliders</u>	
13:50-	Sources and	Ballroom E
17:10	Injectors	
Tuesday Afternoon Poster Sessions	<u>Lepton Accelerators and Colliders</u>	Park Concourse
	<u>Radio- Frequency Systems</u>	Rooms 200 A-C

Wednesday Morning, May 18

8:30-	Linear Colliders	Ballroom A
12:25		
Wednesday Morning Oral Sessions	<u>Lepton Accelerators and Colliders</u>	
	<u>Development in the South, East, and Mid- East/Light Sources</u>	Ballroom B
	<u>Single-Particle Dynamics and Optics</u>	Ballroom C
8:30-	Accelerator	Ballroom E
12:20	Technology	
Wednesday Morning Poster Sessions	<u>Sources and Injectors</u>	Park Concourse
	<u>Radio- Frequency Systems</u>	Rooms 200 A-C

Wednesday Afternoon, May 18

Wednesday Afternoon	Special Session: Accelerator Oral Sessions	Ballrooms D-G
13:00-	Science and Technology Awards	
15:00		
15:00- 17:55	Special Session: Einstein and the World Year of Physics	Ballrooms D-G

Thursday Morning, May 19

8:30- 12:25	Lepton Accelerators and Colliders	Ballroom A
Thursday Morning	Accelerator Technology	
Oral Sessions	Pulsed-Power and High- Intensity Beams	Ballroom B
	Radio- Frequency Systems	Ballroom C
8:30- 12:20	Light Sources and Free- Electron Lasers	Ballroom E
Thursday Morning	Applications of Accelerators & Instrumentation	Park Concourse
Poster Sessions	Instrumentation	Rooms 200 A-C

Thursday Afternoon, May 19

13:50-	Controls and	Ballroom A
17:20	Computing	
Thursday Afternoon Oral Sessions	Two-Stream Instabilities and Collective Processes	Ballroom B
	Low- and Medium-Energy Accelerators and Rings	Ballroom C
13:50-	Accelerator	Ballroom E
17:10	Technology	
Thursday Afternoon Poster Sessions	Linear Colliders	Park Concourse
	Light Sources and Free- Electron Lasers; Development in the South, East, and Mid-East; & Secondary Beam Facilities: Neutrons, Muons, and Photons	Rooms 200 A-C

Friday, May 20

8:30-	Accelerator	Ballroom A
12:25	Technology	
Friday		
Morning	Application of	Ballroom B
Oral	Accelerators	
Sessions		
	Secondary Beam	Ballroom C
	Facilities:	
	Neutrons,	
	Muons, and	
	Neutrinos	
	Extreme Beams	
8:30-	Low- and	Ballroom E
12:20	Medium-Energy	
Friday	Accelerators and	
Morning	Rings	
Poster	Two-Stream	Park
Sessions	Instabilities and	Concourse
	Collective	
	Processes	
	Controls and	Rooms
	Computing &	200 A-C
	Pulsed-Power	
	and High-	
	Intensity	
	Beams/Induction	
	Linacs	
13:50-	Closing Plenary	Ballrooms
17:00		D-G

**Session MOAA: Opening Plenary
Ballrooms D-G, 8:30
Chair: S. Chattopadhyay (JLab)**

8:30 Introduction

N. Holtkamp (ORNL/SNS), S. Chattopadhyay (JLab)

8:45 Welcome

Phil Bredesen (Governor of Tennessee)

9:00 MOAA001—Einstein, Nobel Prize, and
Accelerators

Cecilia Jarlskog (Lund Univ.)

9:40 MOAA002—Personal Perspectives on the
ITRP Recommendation and on the Next Steps
Toward the International Linear Collider

Barry Barish (CalTech)

10:20-10:50 Coffee Break

10:50 MOAA003—PEP-II and KEK-B Operational
Status

John Seeman (SLAC)

11:20 MOAA004—RHIC Operational Status

Thomas Roser (BNL)

11:50 MOAA005—FNAL Tevatron Operational
Status

David McGinnis (FNAL)

Oral Session MOPA—High-Energy Hadron Accelerators and Colliders, Ballroom A @ 13:50
Chair: V. Shiltsev (FNAL)

13:50 MOPA001—Advances in the Understanding and Operations of Superconducting Colliders

Pierre Bauer, Giorgio Ambrosio, Gerald Annala, Joseph DiMarco, Michael A. Martens, Vladimir Shiltsev, John Tompkins, Gueorgui Velev (Fermilab), Luca Bottura (CERN)

14:15 MOPA002—Performance Limitations in High-Energy Ion Colliders

Wolfram Fischer (BNL)

14:40 MOPA003—Testing of the LHC Magnets in Cryogenic Conditions: Operation Challenges, Status, and Outlook

Vinod Chohan (CERN)

14:55 MOPA004—Status of Slip Stacking at Fermilab Main Injector

Kiyomi Seiya, Tim Berenc, Brian Chase, Joseph Dey, Ioannis Kourbanis, James Angell Mac Lachlan, Keith G. Meisner, Ralph James Pasquinelli, John Reid, Claudio Hector Rivetta, Jim Steimel (Fermilab)

15:10 MOPA005—Protection Against Accidental Beam Losses at the LHC

Jorg Wenninger, Ruediger Schmidt (CERN)

Oral Session MOPB—Sources and Injectors
Ballroom B @ 13:50
Chair: R. Sheffield (LANL)

13:50 MOPB001—An 8 GeV Superconducting Injector Linac

G. William Foster (FNAL)

14:15 MOPB002—High Intensity High Charge State ECR Ion Sources

Daniela Leitner (LBNL)

14:40 MOPB003—Two-Charge-State Injector Prototype for the RIA Project

Nikolai Vinogradov, Vladislav Aseev, Peter Ostroumov, Richard Claude Pardo (ANL)

14:55 MOPB004—Progress on Test EBIS and the Design of an EBIS-Based RHIC Preinjector

James Alessi, Edward Beebe, Omar Gould, Ahovi Kponou, Robert Lockey, Alexander I. Pikin, Krsto Prelec, John Ritter, Louis Snydstrup (BNL)

15:10 MOPB005—Recent Advances in the Performance and Understanding of the SNS Ion Source

Robert Welton, Syd Nails Murray, Martin P. Stockli (ORNL/SNS)

Oral Session MOPC—Multiparticle Beam Dynamics

Ballroom C @ 13:50

Chair: K Harkay (ANL)

13:50 MOPC001—Final Results from the Novel Multiturn Extraction Studies at CERN Proton Synchrotron

Massimo Giovannozzi, Roberto Cappi, Simone Silvano Gilardoni, Michel Martini, Elias Métral, Rende Richard Steerenberg (CERN), Anke-Susanne Müller (FZK-ISS-ANKA)

14:15 MOPC002—Benchmark of Space Charge Simulations and Comparison with Experimental Results for High Intensity Low Energy Accelerators
Sarah M. Cousineau (ORNL/SNS)

14:40 MOPC003—Benchmarking of Simulation Codes Based on the Montague Resonance in the CERN-PS

Ingo Hofmann, Giuliano Franchetti (GSI), Massimo Giovannozzi, Elias Métral (CERN), Panagiotis Spentzouris (Fermilab), Shinji Machida (KEK), Ji Qiang (LBNL), Robert Ryne (LBNL/CBP), Sarah M. Cousineau, Jeffrey Alan Holmes (ORNL/SNS), Frederick Jones (TRIUMF)

14:55 MOPC004—Dynamics of a High Density Ion-Beam with Electron Cooling in HIMAC Synchrotron
Tomonori Uesugi, Takashi Fujisawa, Koji Noda, Daisuke Tann, Hiroshi Uchiyama (NIRS), Shinji Shibuya (AEC), Igor Meshkov, Evgeny Syresin (JINR), Yoshinori Hashimoto (KEK), Shiro Ninomiya (RCNP)

15:10 MOPC005—Chromaticity and Impedence Effect on the Transverse Motion of Longitudinal Bunch Slices in the Tevatron

Vahid Houston Ranjbar (FNAL)

**Oral Session MOPA (Cont.)—High-Energy Hadron Accelerators
and Colliders, Ballroom A @ 15:30**
Chair: W. Barletta (BNL)

15:30 MOPA006—Theory and Reality of Beam-
Beam Effects at Hadron Colliders
Yuri Alexahin (FNAL)

15:55 MOPA007—Polarized Proton Collisions at
RHIC

Mei Bai, Leif Ahrens, James Alessi, Joanne Beebe-Wang, Michael Blaskiewicz, Alexandre Bravar, Joseph Michael Brennan, Donald Bruno, Gerry Bunce, John J. Butler, Peter Cameron, Roger Connolly, Joseph DeLong, Theodore D'Ottavio, Angelika Drees, Wolfram Fischer, George Ganetis, Chris J. Gardner, Joseph Glenn, Thomas Hayes, Hsiao-Chaun Hseuh, Haixin Huang, Peter Ingrassia, Ubaldo Iriso, Jonathan S. Lester, Roger C. Lee, Alfredo U. Luccio, Yun Luo, William W. MacKay, Yousef Makdisi, Gregory James Marr, Al Marusic, Gary McIntyre, Robert Michnoch, Christoph Montag, John Morris, Tony Nicoletti, Peter Oddo, Jinnouchi Osamu, Fulvia C. Pilat, Vadim Ptitsyn, Thomas Roser, Todd Satogata, Kevin Smith, Steven Tepikian, Rogelio Tomas, Dejan Trbojevic, Nicholaos Tsoukas, Joseph Tuozzolo, Kurt Vetter, Michelle Wilinski, Alex Zaltsman, Anatoli Zelenski, Keith Zeno, S.Y. Zhang (BNL), Igor Gennadievich Alekseev, Dima Svirida (ITEP)

16:20 MOPA008—On the Feasibility of a Tripler
Upgrade for LHC

Peter M. McIntyre, Akhdiyor Sattarov (Texas A&M)

16:35 MOPA009—Global Decoupling on the RHIC
Ramp

Yun Luo, Peter Cameron, Al Dellapenna, Jonathan S. Lester, Roger C. Lee, Al Marusic, Fulvia C. Pilat, Thomas Roser, Dejan Trbojevic, Jie Wei (BNL)

16:50 MOPA010—Studies of the Chromaticity,
Tune, and Coupling Drift in the Tevatron

Michael A. Martens, Jerry Annala, Pierre Bauer, Vladimir Shiltsev, Gueorgui Velev (Fermilab)

Oral Session MOPB (Cont.)—Sources and Injectors
Ballroom B @ 15:30
Chair: J. Alessi (BNL)

15:30 MOPB006—Frontiers of RF Photoinjectors
Massimo Ferrario (INFN)

15:55 MOPB007—Future Directions in Electron Sources
John Wesley Lewellen (ANL)

16:20 MOPB008—Temporal E-Beam Shaping in an S-Band Accelerator
Shen Yuzhen, James Murphy, Brian Sheehy, Xijie Wang, Zilu Wu (BNL/NSLS), Luca Serafini (INFN-Milano), Massimo Ferrario, Carlo Vicario (INFN/LNF), David Dowell, Sasha Gilevich, Cecile Limborg-Deprey, Henrik Loos (SLAC)

16:35 MOPB009—Review of the Production Process of TTF and PITZ Photocathodes
Daniele Sertore, Paolo Michelato, Laura Monaco (INFN/LASA), Siegfried Schreiber (DESY), Antonio Bonucci (SAES Getters S.p.A.)

16:50 MOPB010—Simulations of Electron Beams Pre-Modulated at the Photocathode
Jonathan Gary Neumann, Ralph Fiorito, Patrick G O'Shea (IREAP), Larry Carr, Timur Shaftan, Brian Sheehy, Yuzhen Shen, Zilu Wu (BNL/NSLS), William Graves (MIT), Henrik Loos (SLAC)

17:05 MOPB011 – Axial Power Input in Photocathode Electron Guns
Dietmar Janssen (FZR), Hans Bluem, Alan Murray Melville Todd (AES), Vladimir Volkov (BINP SB RAS)

Oral Session MOPC (Cont.)—Multiparticle Beam Dynamics
Ballroom C @ 15:30
Chair: S. Henderson

15:30 MOPC006—Simulations and Experiments of Beam-Beam Effects in e+e- Storage Rings
Yunhai Cai, John Seeman (SLAC), Witold Kozanecki (CEA/DSM/DAPNIA), Kazuhito Ohmi, Masafumi Tawada (KEK)

15:55 MOPC007 – Anisotropy-Driven Collective Instabilities in Intense Charged Particle Beams
Edward Startsev, Ronald Davidson, Hong Qin (PPPL)

16:20 MOPC008—Dynamic Beam-Beam Effects Measured at KEKB
Takao Ieiri, Yoshihiro Funakoshi, Takashi Kawamoto, Mika Masuzawa, Makoto Tobiyama (KEK)

16:35 MOPC009—Experiments on LHC Long-Range Beam-Beam Compensations and Crossing Schemes at CERN SPS
Frank Zimmermann, Jean-Pierre Koutchouk, Federico Roncarolo, Jorg Wenninger (CERN), Yannis Papaphilippou (ESRF), Tanaji Sen, Vladimir Shiltsev (Fermilab)

16:50 MOPC010—Longitudinal Dynamics in the University of Maryland Electron Ring
John R. Harris, Renee Feldman (University of Maryland), Donald Feldman, Yijie Huo, Jonathan Gary Neumann, Patrick G. O'Shea, Bryan Quinn (IREAP), Martin Reiser (University Maryland)

Poster Session MPPE—Single-Particle Beam Dynamics and Optics, Ballroom E, 13:50- 17:10

MPPE001—Study of the LNLS Wiggler Non-linear Effects Through Frequency Maps
Ximenes Rocha Resende, Natalia Prado Abreu, Ruy H.A. Farias, Lucia Cabral Jahnel, Lin Liu, Pedro Tavares (LNLS)

MPPE002—Beam Propagation in Misaligned Magnetic Elements: A MatLab Based Code
Tiago Fiorini Silva, Mauricio Lima Lopes, Marcos Martins, Paulo Beolchi Rios (USP/LAL)

MPPE003—Monte Carlo Simulations of Thin Internal Target Scattering In CELSIUS
Yi-Nong Rao (TRIUMF), Dag Reistad (TSL)

MPPE004—Evaluation of Nonlinear Effects in the 3GeV Rapid Cycling Synchrotron of J-PARC
Hideaki Hotchi, Fumiaki Noda (JAERI/J-PARC), Junichi Kishiro, Norio Tani (JAERI/LINAC), Shinji Machida, Alexander Yu. Molodojentsev (KEK)

MPPE005—Dynamic Aperture and Resonance Correction for JPARC-RCS
Alexander Yu. Molodojentsev, Etienne Forest, Shinji

Machida, Masashi Shirakata (KEK), Hideaki Hotchi, Fumiaki Noda, Yoshihiro Shobuda, Hiromitsu Suzuki, Kazami Yamamoto (JAERI/J-PARC), Yoshihiro Ishi (Mitsubishi Electric Corp)

MPPE006—Particle Distribution Function Forming in Nonlinear Systems

Serge Andrianov, Nikolaj Edamenko (St. Petersburg State University)

MPPE007—Problems of Conservative Integration in Beam Physics

Serge Andrianov, Anna Abramova (St. Petersburg State University)

MPPE008—Synthesis of Beam Lines with Necessary Properties

Serge Andrianov (St. Petersburg State University)

MPPE009—2003-2004 Nonlinear Optics Measurements and Modeling for the CERN SPS

Angeles Faus-Golfe (IFIC), Rogelio Tomas (BNL), Gianluigi Arduini, Frank Zimmermann (CERN)

MPPE010—LHC Beam Loss Predictions with Collimation, Halo Tracking and a Detailed Aperture Model

Ralph Assmann, Jean-Bernard Jeanneret, Stefano Redaelli, Guillaume Robert-Demolaize (CERN)

MPPE011—Expected Emittance Growth and Beam Tail Repopulation from Errors at Injection into the LHC

Brennan Goddard, Helmut Burkhardt, Verena Kain, Thys Risselada (CERN)

MPPE012—MAD-X PTC Integration

Frank Schmidt (CERN)

MPPE013—High Precision Measurement of Muon Beam Emittance Reduction in MICE

Chris Rogers, Malcolm Ellis (Imperial College of Science and Technology)

MPPE014—Non-Linear Beam Dynamics Studies of the Diamond Storage Ring

Riccardo Bartolini, Mahdia Belgroune, Ian Martin, James Henry Rowland, Beni Singh (Diamond), James Jones (CCLRC/DL/ASTeC)

MPPE015—Non-Linear Ring Model Calibration with Frequency Analysis of Betatron Oscillations

Riccardo Bartolini (Diamond), Frank Schmidt (CERN)

MPPE016—Hamiltonian Analysis of RF Photo Injectors

Chun-Xi Wang (ANL)

MPPE017—Longitudinal Acceptance in Linear Non-Scaling FFAGs
J. Scott Berg (BNL)

MPPE018—Comparison of Particle Tracking Methods
J. Scott Berg (BNL)

MPPE019—Accuracy of Hard-Edge End Field Models
J. Scott Berg (BNL)

MPPE020—Self-Consistent Numerical and Analytical Modeling of Synchrotron Light Sources
Johan Bengtsson (BNL/NSLS)

MPPE021—Non-Linear Beam Transport System for the LENS 7 MeV Proton Beam
William Philip Jones, David Baxter, Vladimir Peter Derenchuk, Thomas Rinckel, Keith Solberg (IUCF)

MPPE022—Modifications to the Lattice of the Fermilab Debuncher Ring To Improve the Performance of the Stochastic Cooling Systems
Gerald Dugan (Cornell University), Bill Ashmanskas (Fermilab)

MPPE023—Improvement of the Longitudinal Beam Dynamics Tuning Procedure for the MSU RIA Driver Linac
Marc Doleans (MSU), Dmitry Gorelov, Terry L. Grimm, Felix Marti, Xiaoyu Wu, Richard York (NSCL)

MPPE024—Failure Modes Analysis for the MSU-RIA Driver Linac
Xiaoyu Wu, Marc Doleans, Dmitry Gorelov, Terry L. Grimm, Felix Marti, Richard York (NSCL, East)

MPPE025—Dynamical Effects Due to Fringe Field of the Magnets in Circular Accelerators
Yunhai Cai, Yuri Nosochkov (SLAC)

MPPE026—Dynamic Aperture of Proposed Neutrino Factory FFAG
Dan Tyler Abell (Tech-X), J. Scott Berg (BNL)

MPPE027—Modeling of Non-linear Effects in RF Cavities
Dan Tyler Abell, David L. Bruhwiler (Tech-X), Ilan Ben-Zvi (BNL)

MPPE028—Non Linear Error Analysis from Orbit Measurements in SPS and RHIC
Javier Fernando Cardona, Rogelio Tomas (BNL)

MPPE029—Spin Tracking in AGS with Two Partial Siberian Snakes

*Alfredo U. Luccio, Mei Bai, William W. MacKay,
Thomas Roser (BNL), Junpei Takano (RIKEN)*

**MPPE030—Comparison of Off-Line IR Bump and
Action-Angle Kick Minimization**

*Yun Luo, Fulvia C. Pilat, Vadim Ptitsyn, Dejan
Trbojevic, Jie Wei (BNL)*

**MPPE031—Simulation of Resonance Streaming at
the eRHIC Electron Storage Ring**

Christoph Montag (BNL)

**MPPE032—Tracking of Particle Motion in a Proton
FFAG with Adjusted Field Profile**

Alessandro Ruggiero, Joanne Beebe-Wang (BNL)

**MPPE033—RHIC Sextupole Beam-Based Align-
ment**

*Todd Satogata, Peter Cameron, Vladimir N.
Litvinenko, Christoph Montag, Jennifer Niedziela,
Vadim Ptitsyn (BNL)*

**MPPE034—Symmetries and Invariants of the
Envelope Equation**

Hong Qin, Ronald Davidson (PPPL)

**MPPE035—Transfers from High Power Hadron
Linacs to Synchrotrons**

Gerald Peter Jackson (Hbar Technologies)

**MPPE036—Characterization of the Chaotic or
Regular Nature of Dynamical Orbits: A New, Fast
Method**

Ioannis V. Sideris (Northern Illinois University)

**MPPE038—Synchrotron Sidebands of a Linear
Differential Coupling Resonance**

*Masaru Takao, Mitsuhiro Masaki, Jun Schimizu,
Kouichi Soutome, Shiro Takano, Hitoshi Tanaka
(JASRI/SPring-8)*

**MPPE039—A C++ Platform for High-Performance
Tracking Studies for Storage Ring Collider**

Andreas C. Kabel (SLAC)

**MPPE040—Efficient Modeling of Nonlinear Beam
Optics Using Parametric Model Independent Analy-
sis**

*Bijan Sayyar-Rodsari, Eric Hartman, Carl Schweiger
(Pavilion Technologies, Inc, Austin, Texas), Martin J.
Lee, Yiton T. Yan (SLAC)*

**MPPE041—Orbit Stability at the Brazilian Synchro-
tron Light Source**

*Lin Liu, Natalia Prado Abreu, Ruy H.A. Farias,
Lucia Cabral Jahnel, Pedro Tavares (LNLS)*

MPPE042—Beam Dynamics Simulations in FFAG Rings

Francois Meot (CEA/DSM/DAPNIA), Franck Lemuet (CERN)

MPPE043—The Status of Optics Design and Beam Dynamics Study in J-PARC RCS

Fumiaki Noda, Hideaki Hotchi, Pranab Kumar Saha, Yoshihiro Shobuda, Kazami Yamamoto (JAERI/J-PARC), Shinji Machida (KEK)

MPPE044—Damping Wiggler Study at KEK-ATF

Takashi Naito, Hitoshi Hayano, Yosuke Honda, Kiyoshi Kubo, Masao Kuriki, Shigeru Kuroda, Toshiya Muto, Nobuhiro Terunuma, Junji Urakawa (KEK), Maxim Korostelev, Frank Zimmermann (CERN), Kaori Takezawa (Kyoto University), Marc Ross (SLAC)

MPPE045—Accelerator Physics Issues at the 2.5

GeV PLS Storage Ring

Eun-San Kim (PAL)

MPPE046—The Design Study for RCS Lattice of CSNS

Sheng Wang, Shouxian Fang, Qing Qin, Jingyu Tang (IHEP Beijing)

MPPE047—Optics Flexibility and Matching at LHC Injection

Helmut Burkhardt, Oliver Sim Brüning, Brennan Goddard, Verena Kain, Volker Mertens, Thys Risselada, Andre Verdier (CERN)

MPPE048—Beam Based Alignment of the LHC Transfer Line Collimators

Verena Kain, Brennan Goddard, Stefano Redaelli (CERN)

MPPE049—Sensitivity Study for Evaluating the Extracted Beam Parameters of the LLUMC Proton Therapy Synchrotron

George H. Gillespie, Barrey Hill (G.H. Gillespie Associates, Inc.), George Courtralon, Jeff Hubbard, Ed Sanders (LLU/MC)

MPPE051—Phase Trombone Program Migration for the Recycler at Fermilab

Meiqin Xiao (Fermilab)

MPPE052—The Study on Coupling Issues in the Recycler at Fermilab

Meiqin Xiao, Yuri Alexahin, David E. Johnson, Ming-Jen Yang (Fermilab)

MPPE055—Fitting the Fully Coupled ORM for the Fermilab Booster

Xiaobiao Huang, Shyh-Yuan Lee (IUCF), Eric Prebys (Fermilab)

MPPE056—Studies to Increase the Anti-Proton Transmission from the Target to the Debuncher Ring
Ina Reichel (BNL/CBP), Keith Gollwitzer, Steven J. Werkema (Fermilab), Michael Zisman (BNL)

MPPE057—Measurement of the Vertical Emittance and Beta Function at the PEP-II Interaction Point Using the BaBar Detector
Joshua Thompson, Aaron Roodman (SLAC)

MPPE058—Virtual Accelerator for Accelerator Optics Improvement
Yiton T. Yan, Yunhai Cai, Franz-Josef Decker, Stanley Ecklund, John Irwin, John Seeman, Michael K. Sullivan, James Leslie Turner, Ulrich Wienands (SLAC)

MPPE059—Precision Measurement of Coupling Ellipses Parameters in a Storage Ring
Yiton T. Yan, Yunhai Cai (SLAC)

MPPE060—Quadrupole Beam-Based Alignment at RHIC
Jennifer Niedziela, Christoph Montag, Todd Satogata (BNL)

MPPE061—Measurement and Correction of Nonlinear Chromaticity in RHIC
Steven Tepikian, Peter Cameron, Al DellaPenna, Vadim Ptitsyn (BNL)

MPPE062—Measurement and Optimization of Local Coupling from RHIC BPM Data
Rogelio Tomas, Sanjee Abeytunge, Mei Bai, Rama Calaga, Wolfram Fischer (BNL), Andrea Franchi, Giovanni Rumolo (GSI)

MPPE063—Optimization of Steering Elements in the RIA Driver Linac
Eliane Schnirman Lessner, Vladislav S. Assev, Peter Ostromov (ANL)

MPPE064—Dynamic Aperture Study and Lifetime Improvement at the Advanced Photon Source
Vadim Sajaev, Louis Emery (ANL)

MPPE065—Fully Coupled Analysis of Orbit Response Matrices at the FNAL Tevatron
Vadim Sajaev (ANL), Valeri Lebedev, Vladimir Nagaslaev, Alexander Valishev (Fermilab)

MPPE066—Streak Camera Imaging Studies of Vertical Synchro-Betatron-Coupled Electron Beam Motion in the Advanced Photon Source Storage Ring

*Bingxin Yang, Michael Borland, Weiming Guo,
Katherine C. Harkay, Vadim Sajaev (ANL)*

MPPE067—“Zero” Current Operation of the University of Maryland Electron Ring (UMER)
Gang Bai, Santiago Bernal, Irving Haber, Rami Alfred Kishek, Patrick G. O’Shea, Bryan Quinn, Jayakar Charles Tobin Thangaraj, Mark Walter (IREAP), Martin Reiser (University Maryland)

MPPE068—Effects on Flat-Beam Generation from Space-Charge Force and Beamline Errors
Yin-e Sun (University of Chicago), Kwang-Je Kim (ANL), Philippe Regis-Guy Piot (Fermilab)

MPPE069—Beam Dynamics Issues of the Lattice for ALBA
Marc Muñoz, Dieter Einfeld (CELLS)

MPPE070—Correction of the Integer Spin Resonance for Precise Mass Measurement Experiment of Tau Lepton
Anton Bogomyagkov, Sergei Nikitin, Dmitry Shatilov (BINP SB RAS)

MPPE071—Einstein’s General Relativity Effects on Beam Dynamics in a Storage Ring
Dong Dong, Chao Guang Huang, Zhou Zusheng (IHEP Beijing)

MPPE072—Efficient Modeling for Beam-Beam Interactions
Antonina N. Fedorova, Michael G. Zeitlin (RAS/IPME)

MPPE073—Effects of a Passive Harmonic Cavity on Bunch Length and Beam Energy Spread with Considering Radiation Damping and RF Phase Noise
Lung-Hai Chang, Ming-Chyuan Lin, Chaoen Wang, Meng-Shu Yeh (NSRRC)

MPPE074—Commissioning of a Locally Isochronous Lattice at the ALS
Weishi Wan, Gregory James Portmann (LBNL/ALS), Warren Byrne, Hiroshi Nishimura, David Robin, Fernando Sannibale, Alexander Zholents (LBNL)

MPPE075—Simulation of the Effect of an In-Vacuum Undulator on the Beam Dynamics of the ALS
Weishi Wan (LBNL/ALS), Christoph Steier (LBNL)

MPPE076—Design Study on a New Separator for PEEM3
Weishi Wan (LBNL/ALS), Jun Feng, Howard A Padmore (LBNL)

MPPE078—Quantum Theory of Accelerator Optics
Sameen Ahmed Khan (MECIT)

MPPE079—Motion of Particle in Plane Monochromatic Elliptic Polarized Electro Magnetic Field
Garegin Perch Simonyan, Davit Armenak Zakaryan (YSU)

MPPE080—Transversal Deflection of Electrons Moving in Parallel with Linearly Polarized Laser Beam and its Application

Davit Armenak Zakaryan (YSU), Davit Kalantar Kalantaryan (CANDLE; YSU), Edmond David Gazazyan, Karo Ispirian, Michael Karo Ispirian (YerPhI)

MPPE081—The Comparison of a New Beam-Tracking Code to the Acceleration Test

Kazuo Yamamoto, Toshiyuki Hattori (RLNR), Satoru Yamada (NIRS), Masahiro Okamura (RIKEN)

MPPE082—Non-Linear Beam Dynamics in High Resolution Multi-Pass Time of Flight Mass Separator
Vyatcheslav Anatolievitch Shchepunov (ORAU), Hermann Wollnik (JIHIR)

MPPE083—Harmonic Decomposition of Orbit Data for Multipole Analysis

Ming-Jen Yang (Fermilab)

MPPE084—Skew Coupling Analysis Using Closed Local 3-Bump Orbit Data

Ming-Jen Yang, Meiqin Xiao (Fermilab)

MPPE085—The TBT Data from the New Recycler BPM System

Ming-Jen Yang (Fermilab)

Poster Session MPPP—Instabilities and Feedback
Park Concourse 13:50–17:10

MPPP001—A Vertical Multi-Bunch Feedback System for ANKA

Pawel Wesolowski, Ingrid Birkel, Erhard Huttel, Anke-Susanne Müller (FZK-ISS-ANKA), Francisco Pérez, Montserrat Pont (CELLS); FZK-ISS-ANKA)

MPPP002—Stochastic Cooling Electrodes for a Wide Velocity Range in the CR

Fritz Nolden, Bernhard Franzke, Claudius Peschke (GSI), Fritz Caspers, Lars Thorndahl (CERN), Rolf Schuhmann (TEMF), Monika Christine Balk (TU Darmstadt)

MPPP003—Slow Global Orbit Feedback at the PLS
Heung-Sik Kang, Jinhyuk Choi, Myung-Hwan Chun, Ki Man Ha, Jung Yun Huang, Young-Chan Kim, Eun-Hee Lee, Tae-Yeon Lee, Wol Woo Lee, Jae-Hak Suh (PAL)

MPPP004—LHC Orbit Stabilisation Tests at the SPS
Ralph Steinhagen, Jens Andersson, Lars K. Jensen, Rhodri Jones, Jorg Wenninger (CERN)

MPPP005—A New Longitudinal Kicker for TLS
Wai-Keung Lau, Ping Jung Chou, Kuo-Tung Hsu (NSRRC), Cheng Wei Chen, Huan Yang Chen (NTHU), Micha Dehler (PSI)

MPPP006—Issues on Closed Orbit Feedback for NSLSII
Li-Hua Yu (BNL/NSLS)

MPPP007—Operating Performance of the Low Group Delay Woofer Channel in PEP-II
Dmitry Teytelman, John Fox, Daniel Van Winkle (SLAC)

MPPP008—Equilibrium Invariants of X-Y Coupled System
Juhao Wu, Alex Chao, Boaz Nash (SLAC)

MPPP009—Linac Coherent Light Source Longitudinal Feedback Model
Juhao Wu, Paul Emma, Linda Hendrickson (SLAC)

MPPP010—Feedback to Suppress Phase Noise at Aladdin
Robert Arthur Bosch, Ken Jacobs, Kevin J Kleman (UW-Madison/SRC)

MPPP011—Fermilab Recycler Damper Requirements and Initial Design
Martin Hu, James L. Crisp (Fermilab)

MPPP012—First-Principles Simulation and Comparison with Beam Tests for Transverse Instabilities and Damper Performance in the Fermilab Main Injector
Dennis Nicklaus, G. William Foster, Vladimir Kashikhin (Fermilab)

MPPP013—Stabilizing Low Frequency Beam Motion in the Tevatron
Vahid Houston Ranjbar (Fermilab)

MPPP014—A Digital Mode 1 Damper for the Fermilab Main Injector
Philip Adamson (Fermilab; UCL), Joseph Dey (Fermilab)

MPPP015—Operational Performance of a Bunch by Bunch Digital Damper in the Fermilab Main Injector
Philip Adamson (Fermilab; UCL), Bill Ashmanskas, G. William Foster, Sten Hansen, Alberto Marchionni, Dennis Nicklaus, Alexei Semenov, David Wildman (Fermilab), Hyejoo Kang (Stanford University)

MPPP016—Adaptive Feed Forward Beam Loading Compensation Experience at the Spallation Neutron Source Linac
Kay-Uwe Kasemir, Mark Champion, Mark Crofford, Hengjie Ma (ORNL/SNS)

MPPP017—User Operation and Upgrades of the Fast Orbit Feedback at the SLS
Michael Böge, Boris Keil, Andreas Lüdeke, Thomas Schilcher (PSI)

MPPP018—Correction of Insertion Device Induced Orbit Distortions at the SLS
Michael Böge, Jan Chrin, Boris Keil, Jurai Krempasky, Volker Schlott, Thomas Schmidt, Andreas Streun (PSI)

MPPP019—Beam Orbit Diagnostics and Control in CANDLE Storage Ring
Gayane A. Amatuni, Yuri Lawrent Martirosyan, Vasili Mkrtich Tsakanov, Ashot Vardanyan (CANDLE)

MPPP020—RF Phase Modulation at the LNLS Electron Storage Ring
Natalia Prado Abreu, Ruy H.A. Farias, Pedro Tavares (LNLS)

MPPP021—Evolution of the Machine Impedance following the ESRF Upgrade to Low-Gap NEG Coated Aluminium Chambers
Thomas Friedrich Günzel, Laurent Farvacque, Thomas Perron, Jean-Luc Revol (ESRF)

MPPP022—The Impedance of Selected Components of the Synchrotron Light Source Petra III
Rainer Wanzenberg, Klaus Balewski (DESY)

MPPP023—Numerical Calculation of Coupling Impedances for Kicker Modules
Burkhard Doliwa, Herbert De Gersem, Thomas Weiland (TEMF)

MPPP024—Recent Observations on a Horizontal Instability in the DAFNE Positron Ring
Alessandro Drago, Mikhail Zobov (INFN/LNF), Dmitry Teytelman (SLAC)

MPPP025—The Impedance of the Ceramic Beam Pipe in J-PARC
Yoshihiro Shobuda (JAERI/J-PARC), Yong Ho Chin, Kazuhito Ohmi, Takeshi Toyama (KEK)

MPPP026—Development of Longitudinal Coupling Impedance Measurement Platform for BEPCII

*Gang Huang, Huang Wenhui, Shuxin Zheng
(Tsinghua University), Jiuqing Wang, Demin Zhou
(IHEP Beijing)*

MPPP027—Suppression of the Longitudinal Coupled-Bunch Instabilities by the RF Phase Modulation in the Pohang Light Source

Ilmoon Hwang, Moohyun Yoon (POSTECH), Yeung-Jin Han, Eun-San Kim, Jaeseok Yang (PAL)

MPPP028—The Code MBIM1 for the Calculation of the Multibunch Beams Coherent Oscillations Stability (in Approach of Short Bunches)

Natalya Mityanina (BINP SB RAS)

MPPP029—The Code MBIM2 for the Calculation of the Arbitrary Multibunch Beams Longitudinal Coherent Oscillations Stability (in the Case of Long Bunches)

Natalya Mityanina (BINP SB RAS)

MPPP030—Analytic Evaluation of the Series over Azimuthal Harmonics at the Analysis of the Stability of Bunched Beams Coherent Oscillations

Natalya Mityanina (BINP SB RAS)

MPPP031—The CERN-SPS Experiment on Microwave Transmission Through the Beam Pipe

Tom Kroyer, Fritz Caspers (CERN)

MPPP032—Bunch Lengthening and Threshold for Turbulence

Albert Hofmann (CERN)

MPPP033—Beam Transfer Functions and Beam Stabilisation in a Double RF System

Elena Shaposhnikova, Thomas Bohl, Trevor Paul Linnecar (CERN)

MPPP034—Collective Effects in the TLS Storage Ring After the Installation of Superconducting RF Cavity

Ping Jung Chou, Jenny Chen, Kuo-Tung Hsu, Tzong-Shyan Ueng, Chaoen Wang, Min-Huey Wang (NSRRC)

MPPP035—Investigation of APS PAR Vertical Beam Instability

Chihyuan Yao, Yong-Chul Chae, Nicholas Sereno, Bingxin Yang (ANL)

MPPP036—Collective Effects for NSLS-II

Alexei Blednykh, Samuel Krinsky, Boris Podobedov, James Rose, Nathan Towne, Jiunn-Ming Wang (BNL/NSLS)

MPPP037—An Impedance Study of NSLS-II Storage Ring
Alexei Blednykh (BNL/NSLS)

MPPP038—Harmonic Cavity Performance for NSLS-II
Alexei Blednykh, Samuel Krinsky, Boris Podobedov, James Rose, Nathan Towne, Jiunn-Ming Wang (BNL/NSLS)

MPPP039—Impedance and Wakefield of Finite Length Resistor
Samuel Krinsky, Boris Podobedov (BNL/NSLS), Robert Gluckstern (University of Maryland)

MPPP040—Transverse Coupled Mode Instability with Landau Bunch Lengthening Cavity
Samuel Krinsky (BNL/NSLS)

MPPP041—Transverse Instability of a Rectangular Bunch
Valeri Balbekov (Fermilab)

MPPP042—Landau Damping of the Weak Head-Tail Instability at Tevatron
Petr Mikhailovich Ivanov, Yuri Alexahin, Jerry Annala, Valeri Lebedev, Vladimir Shiltsev (Fermilab)

MPPP043—Betatron Tune Spread Generation and Differential Chromaticity Control by Octupole at Tevatron
Petr Mikhailovich Ivanov, Yuri Alexahin, Jerry Annala, Valeri Lebedev (Fermilab)

MPPP044—Impedance Calculation for Ferrite Inserts
Shyh-Yuan Lee, Sara Breitzmann (IUCF), King Yuen Ng (Fermilab)

MPPP045—Two Dimensional Aspects of the Regenerative BBU
Eduard Pozdnyev (Jefferson Lab)

MPPP046—Transient Resistive Wall Wake for Very Short Bunches
Gennady Stupakov (SLAC)

MPPP047—Study of the Longitudinal Beam Instability at Duke Storage Ring
Ping Wang, Jingyi Li, Stepan Mikhailov, Victor Popov, Y. K. Wu (DU/FEL), Grigory Yakovlevich Kurkin (BINP SB RAS)

MPPP048—Improving Dynamic Aperture of the Duke Storage Ring with OK-5 FEL
Y. K. Wu, Jingyi Li, Stepan Mikhailov (DU/FEL)

MPPP049—Observations and Measurements of Anomalous Hollow Electron Beams in a Storage Ring

Y. K. Wu, Jingyi Li (DU/FEL), Juhao Wu (SLAC)

MPPP050—Longitudinal Instabilities in Duke FEL Storage Ring

Y. K. Wu, Jingyi Li, Stepan Mikhailov, Victor Popov, Ping Wang (DU/FEL), Grigory Yakovlevich Kurkin (BINP SB RAS)

MPPP051—Transverse Impedance of Two-Layer Tube

Michael Ivanyan, Andranik Vasili Tsakanian (CANDLE)

MPPP052—Longitudinal Impedance Measurements of the Components for the BEPCII

Demin Zhou, Jiuqing Wang (IHEP Beijing)

Poster Session MPPT—Magnets
Meeting Room 200 A-C, 13:50-17:10

MPPT001—Research and Manufacture of the Prototype Magnets for BEPCII

Caitu Shi, Zan Cao, Wan Chen, Li Li, Ganlin Ni, XianJing Sun, Yaolin Sun, Zhaosheng Yin (IHEP Beijing)

MPPT002—Design and Experiment of the BEPCII IR Conventional Dual Aperture Quadrupole

Zhaosheng Yin, Yingzhi Wu, Jiafei Zhang (IHEP Beijing)

MPPT003—Resolutions of the Problems Occurred in SPEAR3 Magnet Production

Nanyang Li, Richard Merrill Boyce, Dave Ernst (SLAC), Fuhe Huang, Huamin Qu (IHEP Beijing)

MPPT004—End Chamfer Study and Field Measurements of the BEPCII Dipoles

Wan Chen, Zan Cao, Caitu Shi, Zhaosheng Yin (IHEP Beijing)

MPPT005—A New Slotted-Pipe Kicker Magnet for BEPCII Storage Ring

Wen Kang, Yaodou Hao (IHEP Beijing)

MPPT006—The Extraction Kicker System of the RCS in J-PARC

Junichiro Kamiya, Tomohiro Takayanagi (JAERI/J-PARC), Tadamichi Kawakubo (KEK)

MPPT007—Design of the Pulse Bending Magnets for the Injection System of the 3-GeV RCS in J-PARC

Tomohiro Takayanagi, Yoshiro Irie, Junichiro Kamiya (JAERI/J-PARC), Tadamichi Kawakubo, Izumi Sakai (KEK, Ibaraki)

MPPT009—HTS Power Leads for the BTeV Interaction Region

Sandor Feher, Ruben H. Carcagno, Darryl Orris, Yuriy Pischalnikov, Roger Rabehl, C. Sylvester, Mike Tartaglia, John Tompkins (Fermilab)

MPPT010—A New Correction Magnet Package for the Fermilab Booster Synchrotron

Vladimir Kashikhin, David J. Harding, Carson John, James Lackey, Alexander Makarov, William Pellico, Eric Prebys (Fermilab)

MPPT011—Wide Aperture Quadrupole for the Fermilab Main Injector Synchrotron

Vladimir Kashikhin, Leon Bartelson, Bruce Brown, Weiren Chou, David J. Harding, Carson John, David E. Johnson, Jean-Francois Ostiguy, William Robotham (Fermilab)

MPPT012—Measurements of CMD10 Ferrite Blocks for Pulsed Magnets

Vladimir Kashikhin, Ruben H. Carcagno, David J. Harding, Andrzej Makulski, Darryl Orris, Yuriy Pischalnikov, William Robotham (Fermilab)

MPPT013—New Pulsed Orbit Bump Magnets for the Fermilab Booster Synchrotron

James Lackey, David J. Harding, Carson John, Vladimir Kashikhin, Alexander Makarov, Eric Prebys (Fermilab)

MPPT014—Design Concept for AGS Injection Kicker Upgrade to 2 GeV

Gary Dale Wait, Roberto Armenta, Michael John Barnes, Ewart W. Blackmore, Ori Hadary (TRIUMF), Leif Ahrens, Chris J. Gardner, Wu Zhang (BNL)

MPPT015—Design of Septum Magnets Based on Measurements and 3D Calculation of a Prototype Septum Magnet for 3 GeV Synchrotron of J-PARC

Masao Watanabe, Yoshiro Irie, Junichiro Kamiya, Hiromitsu Suzuki, Tomohiro Takayanagi (JAERI/J-PARC), Taihei Shimada (JASRI/SPRING-8), Hiroshi Fujimori, Susumu Igarashi, Tadamichi Kawakubo, Eiji Nakamura (KEK)

MPPT016—Success of the Beam Injection for the PF-AR with a Single Pulsed Quadrupole Magnet without Dipole Kickers

Kentaro Harada, Yukinori Kobayashi, Tsukasa Miyajima, Shinya Nagahashi (KEK)

MPPT017—Design of Switching Magnet for 20-MeV Beamlines at PEFP

Hyung Suck Suh, Hong Sik Han, Seong-Hun Jeong, Young Gyu Jung, Heung-Sik Kang, Hong-Gi Lee, Ki-Hyeon Park, Chun-Kil Ryu (PAL)

MPPT018—Magnets for the ISIS Second Target Station Extracted Proton Beamline

Stephen Jago, Dan Faircloth, Chris Thomas (CCLRC/RAL/ISIS)

MPPT019—Magnet Design for the ISIS Second Target Station Proton Beam Line

Chris Thomas, Dan Faircloth, Stephen Jago (CCLRC/RAL/ISIS)

MPPT020—Magnetic Field Measurement on a Refined Kicker

Tai-Ching Fan, Ching-Shiang Hwang, Fu-Yuan Lin (NSRRC)

MPPT021—Magnetic Measurement System for the NSLS Superconducting Undulator Vertical Test Facility

David Harder, George Rakowsky, John Skaritka (BNL/NSLS)

MPPT022—Magnetic Field Measurement and Compensation in Recycler Electron Cooler

Vitali Tupikov, Grigory Kazakevich, Thomas K. Kroc, Lionel Prost, Chuck Schmidt, Alexander V. Shemyakin, Mary Sutherland, Arden Warner (Fermilab)

MPPT023—A New Magnetic Field Integral Measurement System

Joseph Z. Xu, Isaac Vasserman (ANL)

MPPT024—Rotating Coil for Magnetic Measurement of BEPCII Quadrupole Magnet Prototype

Li Li, Wan Chen, XianJing Sun (IHEP Beijing)

MPPT025—Field Quality and Magnetic Center Stability Achieved in a Variable Permanent Magnet Quadrupole for the ILC

Yoshihisa Iwashita, Takanori Mihara (Kyoto ICR), Masayuki Kumada (NIRS), Cherrill M. Spencer (SLAC)

MPPT026—Insertion Device Upgrade Plans at the NSLS

Toshiya Tanabe, David Harder, George Rakowsky, John Skaritka (BNL/NSLS)

MPPT027—Three-Dimensional Design of a Non-Axisymmetric Periodic Permanent Magnet Focusing System

Chiping Chen, Ronak Bhatt, Alexey Radovinsky, Jing Zhou (MIT/PSFC)

MPPT028—An Air Bearing Rotating Coil Magnetic Measurement System

Stephen C. Gottschalk, Kenneth Kangas, David James Taylor, William Thayer (STI), Zachary Wolf (SLAC)

MPPT029—Performance of an Adjustable Strength Permanent Magnet Quadrupole

Stephen C. Gottschalk, Terence Ellis DeHart, Kenneth Kangas (STI), James T. Volk (Fermilab), Cherrill M. Spencer, Zachary Wolf (SLAC)

MPPT030—Magnetic and Engineering Analysis of an Adjustable Strength Permanent Magnet Quadrupole

Stephen C. Gottschalk, David James Taylor (STI)

MPPT031—Radiation Resistant Magnets for the RIA Fragment Separator

Al Zeller, Valetin Blideanu, Reginald Ronningen, Bradley Sherrill (NSCL), Ramesh C. Gupta (BNL)

MPPT032—Construction and Performance of Superconducting Magnets for Synchrotron Radiation

Ching-Shiang Hwang, Cheng-Hsiang Chang, Cheng-Kuo Chang, Ho-Ping Chang, Chien-Te Chen, Hui-Huang Chen, Jenny Chen, June-Rong Chen, Yuan-Chen Chien, Tai-Ching Fan, Gao-Yu Hsiung, Kuo-Tung Hsu, Shen-Nung Hsu, Ming-Hsiung Huang, Chin-Cheng Kuo, Fu-Yuan Lin (NSRRC)

MPPT033—Development of a Superconducting Helical Undulator for a Polarised Positron Source

Yury Ivanyushenkov, Frederick Stephen Carr (CCLRC/RAL/ASTeC), James Clarke, Oleg B. Malyshev, R. J. Reid, Duncan Scott, Brian Todd (CCLRC/DL/ASTeC), Elwyn Baynham, Thomas William Bradshaw, James Rochford (CCLRC/RAL), Desmond P. Barber (DESY), Gudrid Moortgat-Pick (Durham University), Peter Cooke, John Dainton, T. Greenshaw (Liverpool University)

MPPT034—Field Modelling for the CESR-c Superconducting Wiggler Magnets

James Arthur Crittenden, Alexander A. Mikhailichenko, Eric Smith, Karl William Smolenski, Alexander Temnykh (Cornell University)

MPPT035—Magnetic Field Analysis of Superconducting Undulators with Variable Field Polarization

Suk Hong Kim (ANL)

MPPT036—R&D of Short-Period NbTi and Nb3Sn Superconducting Undulators for the APS

Suk Hong Kim, Charles Doose, Robert Kustom, Elizabeth Rahm Moog, Isaac Vasserman (ANL)

MPPT037—Design Study of Superconducting Magnets for the Super-KEKB Interaction Region

Norihito Ohuchi, Yoshihiro Funakoshi, Haruyo Koiso, Katsunobu Oide, Kiyosumi Tsuchiya (KEK)

MPPT038—Status of BEPC-II IR Magnet Production at BNL

Brett Parker, Michael Anerella, John Escallier, Arup Ghosh, Animesh Kumar Jain, Andrew Marone, Joseph F. Muratore, Peter Wanderer (BNL)

MPPT039—Eddy-Current Effect on Field Multipoles Arising in Dipole and Quadrupole Magnets with Elliptic and Rectangular Beam Pipe

Evgueni Perevedentsev, Alexander L. Romanov (BINP SB RAS)

MPPT040—The LHC Magnetic Field Model

Nicholas Joseph Sammut, Luca Bottura (CERN), Joseph Micallef (University of Malta)

MPPT041—Improvement of the Geometrical Stability of the LHC Cryodipoles when Blocking the Central Support Post

Fabien Seyvet, Jean-Bernard Jeanneret, Alain Poncet, Davide Tommasini (CERN)

MPPT042—Field Quality and Alignment of the Series Produced Superconducting Matching Quadrupoles for the LHC Insertions

Nuria Catalan-Lasheras, Glyn Kirby, Ranko Ostojic, Juan Carlos Perez, Herve Prin, Walter Venturini Delsolaro (CERN)

MPPT043—Low-Beta Quadrupole Designs for the LHC Luminosity Upgrade

Ranko Ostojic, Nuria Catalan-Lasheras, Glyn Kirby (CERN)

MPPT044—The Construction of the Low-Beta Triplets for the LHC

Ranko Ostojic, Mikko Karppinen, Thomas Taylor, Walter Venturini Delsolaro (CERN), R. Bossert, Joseph DiMarco, Sandor Feher, James Kerby, Michael Joseph Lamm, Thomas H. Nicol, Alfred Nobrega, Thomas M. Page, Thomas Peterson, Roger Rabehl, Phil Schlabach, James Strait, C. Sylvester, Mike Tartaglia, Gueorgui Velev (Fermilab), Nobuhiro Kimura, Tatsushi Nakamoto, Toru Ogitsu, Norihito Ohuchi, Takakazu Shintomi, Kiyosumi Tsuchiya, Akira Yamamoto (KEK)

MPPT045—The Assembly of the LHC Short Straight Sections (SSS) at CERN: Project Status and Lessons Learned

Vittorio Parma, Nicolas Bourcey, Paulo Manuel Dos Santos de Campos, Rogerio Carolino Feitor, Makcim Gandel, Peter Rohmig, Martin Schmidlkofer, Ivo Slits (CERN)

MPPT046—Superconducting Helical Snake Magnet for the AGS

Erich Willen, Michael Anerella, John Escallier, George Ganetis, Arup Ghosh, Ramesh C. Gupta, Michael Harrison, Animesh Kumar Jain, Alfredo U. Luccio, William W. MacKay, Andrew Marone, Joseph F. Muratore, Stephen Richard Plate, Thomas Roser, Nicholaos Tsoupas, Peter Wanderer (BNL), Masahiro Okamura (RIKEN)

MPPT047—2-in-1 Large-Aperture IR Quadrupoles for the LHC Luminosity Upgrade

Vadim Kashikhin, Alexander V. Zlobin (Fermilab)

MPPT048—Test Results of HTS Coil and Magnet R&D for RIA

Ramesh C. Gupta, Michael Anerella, Michael Harrison, William Sampson, Jesse Schmalzle (BNL), Al Zeller (NSCL)

MPPT049—Optimization of Open Midplane Dipole Design for LHC IR Upgrade

Ramesh C. Gupta, Michael Anerella, Arup Ghosh, Michael Harrison, Jesse Schmalzle, Peter Wanderer (BNL), Nikolai V. Mokhov (Fermilab)

MPPT050—Test Results for LHC Insertion Region Dipole Magnets

Joseph F. Muratore, Michael Anerella, John P. Cozzolino, George Ganetis, Arup Ghosh, Ramesh C. Gupta, Michael Harrison, Animesh Kumar Jain, Andrew Marone, Stephen Richard Plate, Jesse Schmalzle, Richard Thomas, Peter Wanderer, Erich Willen, Kuo-Chen Wu (BNL)

MPPT051—Reshimming of Tevatron Dipoles; A Process-Quality and Lessons-Learned Perspective

James N. Blowers, Ray Hanft, David J. Harding, Carson John, William Robotham (Fermilab)

MPPT052—Adding Sextupole to a Quadrupole to Control Chromaticity in the Fermilab AP2 Beamline

David J. Harding, Henry Glass, Steven J. Werkema (Fermilab)

MPPT053—Restoring the Skew Quadrupole Moment in Tevatron Dipoles

David J. Harding, Pierre Bauer, James N. Blowers, Joseph DiMarco, Henry Glass, Ray Hanft, Carson

John, William Robotham, Mike Tartaglia, John Tompkins, Gueorgui Velev (Fermilab)

MPPT054—Development of Nb3Sn Accelerator Magnets at Fermilab

Alexander V. Zlobin, Giorgio Ambrosio, Nicolai Andreev, Emanuela Barzi, R. Bossert, Ruben H. Carcagno, Joseph DiMarco, Luciano Elementi, Sandor Feher, Vadim Kashikhin, Vladimir Kashikhin, Robert Kephart, Michael Joseph Lamm, Igor Novitski, Darryl Orris, Yuriy Pischalnikov, Phil Schlabach, Richard Staneck, C. Sylvester, Mike Tartaglia, John Tompkins, Daniele Turrioni, Gueorgui Velev, Ryuji Yamada, Victor Yarba (Fermilab)

MPPT055—The LANSCE Switchyard Kicker Project

Mark Gulley, Henry W. Alvestad, Walter C. Barkley, David B. Barlow, Dean S. Barr, Gloria A. Bennett, Leo J. Bitteker, Eric Bjorklund, Michael J. Borden, Mary J. Burns, Gary Carr, Jeffry L. Casados, Stacy Chacon, Stanley Cohen, Justo F. Cordova, John A. Faucett, Louis E. Fernandez, Daniel Fitzgerald, Matthew Fresquez, Floyd R. Gallegos, Robert Garnett, J. Douglas Gilpatrick, Fermin Gonzales, Frederick W. Gorman, Michael J. Hall, David J. Hayden, David Henderson, Glen D. Johns, Debora Kerstiens, Matthew D. Lusk, Alfred J. Maestas, Henry P. Marquez, Derwin Martinez, Martin P. Martinez, John B. Merrill, Edward A. Morgan, Angela Naranjo, James Francis O'Hara, Felix R. Olivas, Michael A. Oothoudt, Tim D. Pence, Edward M. Perez, Chandra Pillai, Brandon Jason Roller, Amos M. Romero, Dolores B. Romero, Gary Sanchez, Jacob B. Sandoval, Stuart Schaller, Fred E. Shelley, Robert Shurter, Jerry L. Stockton, James Sturrock, Victor P. Vigil, Thomas Zaugg (LANL/LANSCE), Ross E. Meyer, Frank P. Romero, James R. Sims (LANL)

MPPT056—First Ideas Towards the Super-Conducting Magnet Design for the HESR at FAIR

Ralf Eichhorn, F.M. Esser, Achim Gussen (FZJ), Siegfried Martin (FZJ/IKP)

MPPT057—Design of a Magnet System for a Muon Cooling Ring

Stephen Alan Kahn, Harold G Kirk (BNL), Frederick E. Mills (Fermilab), David Cline, Albert A. Garren (UCLA)

MPPT058—Progress on the Focus Coils for the MICE Channel

Michael Green (LBNL), Yury Ivanyushenkov (CCLRC/RAL), Wing Lau, Rohan Senanayake, Stephanie Yang (OXFORDphysics)

MPPT059—Progress on the Coupling Coil for the MICE Channel

Michael Green, Derun Li, Steve Virostek, Michael Zisman (BNL), Yury Ivanyushenkov (CCLRC/RAL), Wing Lau, Adam White, Holger Witte, Stephanie Yang (OXFORDphysics)

MPPT060—Comparison of Designed and Measured Characteristics of CESR's SC Wiggler

Alexander A. Mikhailichenko (Cornell University)

MPPT061—Ideal Wiggler

Alexander A. Mikhailichenko (Cornell University)

MPPT062—3D Trajectory Analyses for Positron Spectrometer

Alexander A. Mikhailichenko (Cornell University)

MPPT063—Optimized Analyzing Magnet for Measurements of Polarization of Gamma-Quants at 10 MeV

Alexander A. Mikhailichenko (Cornell University)

MPPT064—Elements of Magneto-Optics Acting in One Direction

Alexander A. Mikhailichenko (Cornell University)

MPPT065—Resistive Undulator

Alexander A. Mikhailichenko (Cornell University, Ithaca, New York)

MPPT066—Pulsed Undulator for Polarized Positron Production

Alexander A. Mikhailichenko (Cornell University)

MPPT067—Stray Field Reduction in Eddy Current Septum Magnets

Derek Shuman, Ross Schlueter, Christoph Steier, Gregory D. Stover (BNL)

MPPT068—A High Gradient, Low Inductance Pulsed Quadrupole for Intense Ion Beam Transport

Derek Shuman, Andy Faltens, Gary Ritchie, Peter Seidl (BNL), Michel Kireeff Covo (LLNL)

MPPT069—A High Field Pulsed Solenoid for Intense Ion Beam Transport

Derek Shuman, Gary Ritchie, David Vanecek, William Waldron, Simon Yu (BNL)

MPPT070—Construction and Power Test of the Extraction Kicker Magnet for the SNS Accumulator Ring

Chien Pai, Harald Hahn, Hsiao-Chaun Hseuh, Yong Yung Lee, Wuzheng Meng, Jian-Lin Mi, Deepak Raparia, Jon Sandberg, Robert J. Todd, Nicholaos Tsoupas, Joseph Tuozzolo, David S. Warburton, Jie Wei, Daniel Weiss, Wu Zhang (BNL)

MPPT071—The Lambertson Septum Magnet of the Spallation Neutron Source

Jim Rank, Yong Yung Lee, William J. McGahern, Gary Miglionico, Deepak Raparia, Nicholaos Tsoupas, Joseph Tuozzolo, Jie Wei (BNL)

MPPT072—3D Simulation Studies of SNS Ring Doublet Magnets

Jian-Guang Wang (ORNL/SNS), Nicholaos Tsoupas (BNL), Marco Venturini (LBNL)

MPPT073—Field Distribution of Injection Chicane Dipoles in SNS Ring

Jian-Guang Wang (ORNL/SNS)

MPPT074—Design of RCS Magnets for CSNS 1.6GeV Synchrotron

Chang Dong Deng, Zan Cao (IHEP Beijing)

MPPT075—Analysis and Design of Backing Beam for Multipole Wiggler (MPW14) at PLS

Hong-Gi Lee, Chin Wha Chung, Hong Sik Han, Young Gyu Jung, Dong Eon Kim, Ki-Hyeon Park, Hyung Suck Suh (PAL)

MPPT076—Conceptual Designs of Magnet System for the Taiwan Photon Source Project

Cheng-Hsiang Chang, Tai-Ching Fan, Ching-Shiang Hwang (NSRRC)

MPPT077—Radiation of Electron in the Field of Plane Light Wave

Andrey Yurij Zelinsky, Ilia Vladimir Drebot, Yurij Grigor'ev, Olga Zvonarjova (NSC/KIPT)

MPPT078—Present Status of Design and Development of NESTOR X-Ray Source

Andrey Yurij Zelinsky, Valeriy Pavel Androsov, Eugene Victor Bulyak, Ilia Vladimir Drebot, Peter Gladkikh, Vjatsheslav Grevtsev, Vadim Anatolij Ivashchenko, Ivan Karnaukhov, Vladislav Kozin, Vladimir Lapshin, Vadim Lyashchenko, Vasilij Markov, Nikolaj Mocheshnikov, Vadim Molodkin, Andrey Mytsykov, Ivan Necklyudov, Fedor Peev, Alexandr Valerij Rezaev, Alexander Shcherbakov, Vasilij Skirda, Vladislav Skomorokhov, Yurij Nikolajevich Telegin, Vladimir Trotsenko, Olga Zvonarjova (NSC/KIPT), Roman Tatchyn (SLAC), Jan Botman (TUE)

MPPT079—Measurement, Shimming and Beam Commissioning of an APPLE-II Type Undulator at Daresbury Laboratory for the SRS

James Clarke, Fay Elizabeth Hannon, Duncan Scott, Ben Shepherd, Naomi Wyles (CCLRC/DL/ASTeC)

MPPT080—Design, Fabrication and Characterization of a Large-Aperture Quadrupole Magnet for CESR-c

Mark Alan Palmer, James Arthur Crittenden, Jagadisan Kandaswamy, Tim O'Connell, Alexander Temnykh (Cornell University)

MPPT081—Undulator for the LCLS Project—

Changes in the Magnet Structure Design

Emil Trakhtenberg, Mark Erdmann, Thomas Powers (ANL)

MPPT082—The 8 cm Period Electromagnetic

Wiggler Magnet with Coils Made from Sheet Copper

George Herman Biallas, Stephen Vincent Benson, Tommy Hiatt, George R. Neil, Michael David Snyder (Jefferson Lab)

MPPT083—Radiation Damage to Advanced Photon Source Undulators

Shigemi Sasaki, Charles Doose, Elizabeth Rahm Moog, Maria Petra, Isaac Vasserman (ANL)

MPPT084—Dipole and Quadrupole Magnets for the Duke FEL Booster Injector

Stepan Mikhailov (DU/FEL, Durham, North Carolina), Nikolai Gavrilov, Denis Gurov, Oleg B. Kiselev, Alexander Ogurtsov, Egor S Rouvinsky, Konstantin Zhiliaev (BINP SB RAS)

MPPT085—Fast Magnets for the NSLS-II Injection

Igor Pinayev (DU/FEL, Durham, North Carolina), Timur Shaftan (BNL/NSLS)

MPPT086—Conventional Magnets Design for the Candle Storage Ring

Vitali Khachatryan, Artush Petrosyan (CANDLE)

MPPT087—Fast Magnets for Light Sources

Nils Hauge, Henning Bach (Danfysik A/S)

MPPT088—Magnet Systems for Diamond Booster Synchrotron

Henning Bach, Nils Hauge (Danfysik A/S)

MPPT089—Magnetic Blocks Measurement and Sorting for the SOLEIL HU80 Undulator

Bruno Diviacco, Roberto Bracco, Cristina Knapic, Daniele Millo, Dino Zangrandi (ELETTRA), Zeus Martí (LLS)

MPPT090—Design, Construction, and Field Characterization of a Variable Polarization Undulator for SOLEIL

Bruno Diviacco, Roberto Bracco, Cristina Knapic, Daniele Millo, Dino Zangrandi (ELETTRA), Zeus Martí (LLS), Michel Massal (SOLEIL)

MPPT091—Managing Coil Epoxy Vacuum Impregnation Systems at the Manufacturing Floor Level To Achieve Ultimate Properties in State-of-the-Art Magnet Assemblies

*Jeffrey George Hubrig (Innovation Services, Inc),
George Herman Biallas (Jefferson Lab)*

Oral Session TOAA – Magnets
Ballroom A @ 8:30
Chair: M. Harrison (BNL)

8:30 TOAA001—Limits of Nb₃Sn Magnets
Shlomo Caspi (LBNL/AFR), Paolo Ferracin (LBNL)

8:55 TOAA002—U.S. Accelerator Contribution to the LHC
Michael Joseph Lamm (FNAL)

9:20 TOAA003—Survey of Superconducting Insertion Devices for Light Sources
Nikolai Alexandrovich Mezentsev, Evgeni Perevedentsev (BINP)

9:45 TOAA004—Field Quality Study in High-Field Nb₃Sn Accelerator Magnets
Vadim Kashikhin, Giorgio Ambrosio, Nicolai Andreev, Emanuela Barzi, R. Bossert, Joseph DiMarco, Vladimir Kashikhin, Michael Joseph Lamm, Igor Novitski, Phil Schlabach, John Tompkins, Gueorgui Velev, Ryuji Yamada, Alexander V. Zlobin (Fermilab)

10:00 TOAA005—Field Quality Optimization of Superconducting Quadrupoles for the HCX Experiment
GianLuca Sabbi, Andy Faltens, Alan Lietzke, Sara Mattafirri, Peter Seidl (LBNL), Nicolai Martovetski (LLNL)

Oral Session TOAB—Light Sources and Free-Electron Lasers
Ballroom B @ 8:30
Chair: M. Cornacchia (SLAC)

8:30 TOAB001—VUV/Soft X-Ray FEL Projects on the Horizon
Rene Johan Bakker (PSI)

8:55 TOAB002—First Results from the VUV FEL at DESY
Bart Faatz (DESY)

9:20 TOAB003—First Results from the DUV-FEL Upgrade at BNL
Xijie Wang, James Murphy, Igor Pinayev, George

Rakowsky, James Rose, Timur Shaftan, Brian Sheehy, John Skaritka, Zilu Wu, Li-Hua Yu (BNL/NSLS, Upton, Long Island, New York), Henrik Loos (SLAC)

9:45 TOAB004—An Optimized Low-Charge Configuration of the Linac Coherent Light Source
Paul Emma, Zhirong Huang, Cecile Limborg-Deprey, Juhao Wu (SLAC), William M. Fawley, Max Zolotorev (LBNL), Sven Reiche (UCLA)

10:00 TOAB005—TBD

Oral Session TOAC—Instabilities and Feedback
Ballroom C @ 8:30
Chair: E. Shaposhnikova (CERN)

8:30 TOAC001—Overview of Impedance and Single-Beam Instability Mechanisms
Elias Métral (CERN)

8:55 TOAC002—Beam Loading Compensation for Super B-Factories
Dmitry Teytelman (SLAC)

9:20 TOAC003—Stochastic Cooling for Bunched Beams
Michael Blaskiewicz, Joseph Michael Brennan, Jie Wei (BNL)

9:45 TOAC004—Experimental Investigation of Beam Breakup in the Jefferson Laboratory 10 kW FEL Upgrade
Chris Tennant, David Douglas, Kevin Jordan, Lia Merminga, Eduard Pozdeyev, Haipeng Wang (Jefferson Lab), Ivan Vasilyevich Bazarov, Georg Hoffstaetter, Charles Kent Sinclair (Cornell University), Stefan Simrock (DESY), Todd Iversen Smith (Stanford University)

10:00 TOAC005—Coherent Synchrotron Radiation as a Diagnostic Tool for the LCLS Longitudinal Feedback System
Juhao Wu, Paul Emma, Zhirong Huang (SLAC)

TOAA (Cont.)—Magnets
Ballroom A @ 10:40
Chair: J. Strait (FNAL)

10:40 TOAA006—Development of Superconducting Combined Function Magnets for the Proton Transport Line for the J-PARC Neutrino Experiments
Tatsushi Nakamoto, Yasuo Ajima, Norio Higashi, Atsuko Ichikawa, Nobuhiro Kimura, Takashi Kobayashi, Yasuhiro Makida, Toru Ogitsu, Hirokatsu Ohhata, Ken-ichi Sasaki, Minoru Takasaki, Ken-ichi Tanaka, Akio Terashima, Takayuki Tomaru, Akira Yamamoto (KEK), Michael Anerella, John Escallier, George Ganetis, Ramesh C. Gupta, Michael Harrison, Animesh Kumar Jain, Joseph F. Muratore, Brett Parker, Peter Wanderer (BNL), Tetsuhiro Obana (GUAS/AS), Yosuke Iwamoto (JAERI)

11:05 TOAA007—SNS Injection and Extraction Devices
Deepak Raparia (BNL)

11:30 TOAA008—Progress and Status of SNS Magnet Measurements at ORNL
Ted Hunter, Steve Heimsoth, Doug Lebon, Robert McBrien, Jian-Guang Wang (ORNL/SNS)

11:45 TOAA009—Recent Test Results of the Fast-Pulsed 4T-Dipole GSI001
Gebhard Moritz, Juris Kaugerts (GSI), John Escallier, George Ganetis, Animesh Kumar Jain, Andrew Marone, Joseph F. Muratore, Richard Thomas, Peter Wanderer (BNL), Martin Wilson (Oxford Instruments)

12:00 TOAA010—Serpentine Coil Topology for BNL Direct Wind Superconducting Magnets
Brett Parker, John Escallier (BNL)

TOAB (Cont.)—Light Sources and Free-Electron Lasers
Ballroom B @ 10:40
Chair: L. Rivkin (PSI)

10:40 TOAB006—First Year of SPEAR 3 Operation
R. Hettel (SLAC)

11:05 TOAB007—Femtoslicing in Storage Rings
S. Khan (BESSY)

11:30 TOAB008—New Storage Ring Light Sources on the Horizon
Boris Podobedov (BNL)

11:55 TOAB009—Generation of Short X-Ray Pulses Using Crab Cavities at the Advanced Photon Source

Katherine C. Harkay, Michael Borland, Yong-Chul Chae, Glenn Decker, Roger J. Dejes, Louis Emery, Weiming Guo, Douglas Horan, Kwang-Je Kim, Robert Kustom, Yuelin Li, Dennis M. Mills, Stephen Milton, Elizabeth Rahm Moog, Geoffrey Pile, Vadim Sajaev, Sarvjit D. Shastri, Geoff J. Waldschmidt, Marion White, Bingxin Yang (ANL), Alexander Zholents (LBNL/AFR)

12:10 TOAB010—Research and Development of a Variable Polarization Superconducting Undulator at the NSLS

Shailendra Chouhan, George Rakowsky (BNL)

Oral Session TOAD—Instrumentation

Ballroom C @ 10:40

Chair: T. Shea (ORNL/SNS)

10:40 TOAD001—Techniques for Pump-Probe Synchronisation of Fsec Radiation Pulses
Holger Schlarb (DESY)

11:05 TOAD002—Novel Tune Diagnostics for the Tevatron

Cheng-Yang Tan (Fermilab)

11:30 TOAD003—Development of the Beam Diagnostics System for the J-PARC Rapid-Cycling Synchrotron

Naoki Hayashi, Seiji Hiroki, Junichi Kishiro, Yuzou Teruyama, Ryoji Toyokawa (JAERI/J-PARC), Dai Arakawa, Seishu Lee, Takako Miura, Takeshi Toyama (KEK)

11:45 TOAD004—The Possibility of Noninvasive Micron High Energy Electron Beam Size Measurement Using Diffraction Radiation

Gennady Naumenko, A.P. Potylitsyn (Tomsk Polytechnic University), Sakae Araki, Alexander Aryshev, Hitoshi Hayano, Pavel Karataev, Toshiya Muto, Junji Urakawa (KEK), Marc Ross (SLAC), Ryosuke Hamatsu (TMU), David Cline, Yasuo Fukui (UCLA)

12:00 TOAD005—Observation of Frequency Locked Coherent Transition Radiation

*Roark A. Marsh, Amit S. Kesar, Richard J. Temkin
(MIT/PSFC)*

**Poster Session TPAE—Advanced Concepts
Ballroom E, 8:30-12:20**

**TPAE001—Experiments on Wake Field Acceleration
in Plasma and the Program of the Further Works in
YerPhI**

*Marzik Petrosyan, Mikhail Akopov, Yurik Garibyan,
Edouard Laziev, Robert Melikian, Yuri Nazaryan,
Mesrop Oganesyan, Gevorg Petrosyan, Lyudvig
Petrosyan, Vazgen Pogosyan, Gagik Tovmasyan
(YerPhI)*

**TPAE002—The Project PLASMONX for Plasma
Acceleration Experiments at ILIL and LNF and a
Thomson X-Ray Source at SPARC**

*Luca Serafini, Franco Alessandria, Alberto Bacci,
Ilario Boscolo, Simone Cialdi, Carlo De Martinis,
Dario Giove, Cesare Maroli, Marco Mauri, Vittoria
Petrillo, Roberto Pozzoli, Massimiliano Romé
(INFN-Milano), Walter Baldeschi, Alessandro
Barbini, Marco Galimberti, Antonio Giulietti,
Leonida Antonio Gizzi, Petra Koester, Luca Labate,
Antonella Rossi, Paolo Tommasini (CNR/IPP),
Ubaldo Bottigli, Bruno Golosio, Pier Nicola Oliva,
Angela Poggiu, Simone Stumbo (INFN-Cagliari),
Francesco Broggi (INFN/LASA), David Alesini,
Marco Bellaveglia, Sergio Bertolucci, Maria Biagini,
Roberto Boni, Manuela Boscolo, Michele Castellano,
Alberto Clozza, Giampiero Di Pirro, Alessandro
Drago, Adolfo Esposito, Massimo Ferrario, Daniele
Filippetto, Valeria Fusco, Alessandro Gallo, Andrea
Ghigo, Susanna Guiducci, Maurizio Incurvati, Carlo
Ligi, Fabio Marcellini, Mauro Migliorati, Andrea
Mostacci, Luigi Palumbo, Luigi Pellegrino, Miro
Preger, Ruggero Ricci, Claudio Sanelli, Mario Serio,
Francesco Sgamma, Bruno Spataro, Alessandro
Stecchi, Angelo Stella, Franco Tazzioli, Cristina
Vaccarezza, Mario Vescovi, Carlo Vicario (INFN/
LNF), Carlo Alberto Cecchetti, Danilo Giulietti
(UNIPI), Rodolfo Bonifacio, Nicola Piovella
(Universita' degli Studi di Milano)*

**TPAE003—Numerical Study of Injection Mechanisms for Generation of Mono-Energetic
Femtosecond Electron Bunch from the Plasma
Cathode**

*Takenu Ohkubo, Mitsuru Uesaka (UTNL), Alexei
Zhidkov (NIRS)*

TPAE004—Generation of Femtosecond Electron Bunches by Ultra-Intense Laser Wake-Field Acceleration in Plasma Channels

Alexei Zhidkov, Mitsuru Uesaka (UTNL)

TPAE005—Generation of Small Energy Spread Electron Beam from Self-Modulated Laser Wakefield Accelerator

Changbum Kim, In Soo Ko (POSTECH), Nasr Hafz, Guang-Hoon Kim, Hyyong Suk (KERI)

TPAE006—Current Status of Design of the Large-Scale Particle-in-Cell Code at KERI

Jincheol Benjamin Kim (POSTECH), Hyyong Suk (KERI), In Soo Ko (PAL; POSTECH)

TPAE007—High-Power Positron Beams and Development Prospects for Technological Innovations

Vladimir Gorev (RRC Kurchatov Institute)

TPAE008—Analysis of Metallic Photonic Band Gap Structures for Accelerator Applications with the Boundary Integral Equation Method

Lyudmyla Illyashenko-Raguin, Peter Arbenz (ETH), Jean-Yves Raguin (PSI)

TPAE009—On the Structure of Electron and the Nature of Its Spin

Nikolai Maksyuta (National Taras Shevchenko University of Kyiv)

TPAE010—Resonant Excitation of Selected Modes by a Train of Electron Bunches in a Rectangular Dielectric Wakefield Accelerator

Ivan N. Onishchenko, Nikolay Onishchenko, Gennadiy Sotnikov (NSC/KIPT), Thomas C. Marshall (Yale University)

TPAE011—Fast Sweeping Device for Laser Bunch

Alexander A. Mikhailichenko (Cornell University)

TPAE012—Rectangular Diamond-Lined Accelerator Structure

Changbiao Wang, Vyacheslav P. Yakovlev (Omega-P, Inc.), Jay L. Hirshfield (Omega-P, Inc.; Yale University)

TPAE013—Rectangular Dielectric-Lined Two-Beam Accelerator Structure

Changbiao Wang, Vyacheslav P. Yakovlev (Omega-P, Inc.), Thomas C. Marshall (Columbia University), Jay L. Hirshfield (Omega-P, Inc.; Yale University)

TPAE014—Optical Phase Locking of Modelocked Lasers for Particle Accelerators

Tomas Plettner, Supriyo Sinha, Jeffrey Wisdom (Stanford University), Eric R. Colby (SLAC)

TPAE015—Laser and Particle Guiding Micro-Elements for Particle Accelerators

Tomas Plettner, Romain Maxime Gaume, Jeffrey Wisdom (Stanford University), James Spencer (SLAC)

TPAE016—The Argonne Wakefield Accelerator Facility: Status and Recent Activities

Manoel Conde, Sergey P. Antipov, Wei Gai, Chunguang Jing, Richard Konecny, Wanming Liu, John Gorham Power, Haitao Wang, Zikri Yusof (ANL)

TPAE017—Progress on High Power Tests of Dielectric-Loaded Accelerating Structures

Chunguang Jing, Wei Gai, Richard Konecny, Wanming Liu, John Gorham Power (ANL), Steven H. Gold (NRL)

TPAE018—34.272 GHz Multilayered Dielectric-Loaded Accelerating Structure

Chunguang Jing, Wei Gai, Wanming Liu, John Gorham Power (ANL), Alex Kanareykin (Euclid Concepts, LLC)

TPAE019—Experimental Progress on a 1 GeV Laser Accelerator at LBNL

Wim Leemans, Eric Esarey, Cameron Guy Robinson Geddes, Csaba Toth, Jeroen Van Tilborg (LBNL), Pierre Michel, Bob Nagler, Kei Nakamura, Carl Bernhardt Schroeder (LBNL/CBP), Anthony J. Gonsalves, Simon Hooker, D Spence (OXFORDphysics), Thomas Cowan, Catalin Filip, Estelle Michel (University of Nevada)

TPAE020—Electron Injection into Laser Plasma Wakefields via Two-Beam Colliding Pulse Scheme

Kei Nakamura, Eric Esarey, Gwenael Fubiani, Cameron Guy Robinson Geddes, Wim Leemans, Pierre Michel, Carl Bernhardt Schroeder, Csaba Toth, Jeroen Van Tilborg (LBNL), Catalin Filip (University of Nevada)

TPAE021—Laser Guiding of a 100 TW Laser Beam in a Capillary Discharge Waveguide

Bob Nagler (LBNL/CBP), Eric Esarey, Catalin Filip, Cameron Guy Robinson Geddes, Wim Leemans, Csaba Toth (LBNL), Anthony J. Gonsalves, Simon Hooker, D. Spence (OXFORDphysics), Thomas Cowan (University of Nevada)

TPAE022—Analytical and Numerical Calculations of Two-Dimensional Dielectric Photonic Band Gap Structures and Cavities for Laser Acceleration

Ksenia R. Samokhvalova, Chiping Chen (MIT/PSFC), Bao Liang Qian (National University of Defense Technology)

TPAE023—3D Metallic Lattices for Accelerator Applications

Michael A. Shapiro, Jagadishwar R. Sirigiri, Richard J. Temkin (MIT/PSFC), Gennady Shvets (The University of Texas at Austin)

TPAE024—Determination of Phase Space in SLAC Main Accelerator Beams and Application to Plasma Accelerator Studies

Christopher Barnes, Franz-Josef Decker, Paul Emma, Mark Hogan, Rasmus Ischebeck, Richard Iverson, Patrick Krejcik, Caolionn O'Connell, Robert Siemann, Dieter Walz (SLAC), Chris Clayton, Chengkun Huang, Devon K. Johnson, Chan Joshi, Wei Lu, Kenneth Marsh, Warren Mori, Miaomiao Zhou (UCLA), Suzhi Deng, Tom Katsouleas, Patric Muggli, Erdem Oz (USC)

TPAE025—Field Ionization of a Neutral Lithium Vapor Using a 28.5 GeV Electron Beam

Caolionn O'Connell, Christopher Barnes, Franz-Josef Decker, Mark Hogan, Richard Iverson, Patrick Krejcik, Robert Siemann, Dieter Walz (SLAC), Chris Clayton, Chengkun Huang, Devon K. Johnson, Chan Joshi, Wei Lu, Kenneth Marsh, Warren Mori, Miaomiao Zhou (UCLA), Suzhi Deng, Tom Katsouleas, Patric Muggli, Erdem Oz (USC)

TPAE026—Wakefields in a Dielectric Tube with Frequency Dependent Dielectric Constant

Robert Siemann, Alex Chao (SLAC)

TPAE027—Calculations for Tera-Hertz (THz) Radiation Sources

James Spencer, Yasser Hussein (SLAC), Samir El-Ghazaly (University of Tennessee)

TPAE028—Beam Dynamics Studies for a Laser Acceleration Experiment

James Spencer, Eric R. Colby, Robert Noble, Dennis Thomas Palmer, Robert Siemann (SLAC)

TPAE029—High Order Resonance IFEL Interaction at 800 nm

Chris M.S. Sears, Eric R. Colby, Benjamin Cowan, Robert Siemann, James Spencer (SLAC), Tomas Plettner (Stanford University)

TPAE030—Distributed Bragg Coupler for Optical All-Dielectric Electron Accelerator

Zhiyu Zhang, Ronald Ruth, Sami G Tantawi (SLAC)

TPAE031—Simulations of Laser Pulse Coupling and Transmission Efficiency in Plasma Channels

Rodolfo Giaccone, David L. Bruhwiler, Dimitre Dimitrov, Peter Messmer (Tech-X), John R. Cary (CIPS; Tech-X), Eric Esarey, Cameron Guy Robinson Geddes, Wim Leemans (LBNL)

TPAE032—Particle-in-Cell Simulations of Lower-Density CM-Scale Capillary Channels

Peter Messmer, David L. Bruhwiler (Tech-X), Eric Esarey, Cameron Guy Robinson Geddes, Wim Leemans, Brad Shadwick (LBNL), Carl Bernhardt Schroeder (LBNL/CBP)

TPAE033—Experimental and Numerical Studies of Particle Acceleration by an Active Microwave Medium

Paul Schoessow (Tech-X), Alex Kanareykin (Euclid Concepts, LLC)

TPAE034—Hose Instability of Intense Electron Beam in a Self-Ionized Gas

Suzhi Deng, Tom Katsouleas, Patric Muggli, Erdem Oz (USC), Christopher Barnes, Franz-Josef Decker, Richard Iverson, Caolionn O'Connell (SLAC), Chris Clayton, Ricardo A. Fonseca, Chengkun Huang, Devon K. Johnson, Chan Joshi, Wei Lu, Warren Mori, Miaomiao Zhou (UCLA)

TPAE035—Halo Formation and Emittance Growth of Positron Beams in Long, Dense Plasmas

Patric Muggli, Tom Katsouleas, Seung lee (USC), Ralph Assmann (CERN), Pantaleo Raimondi (INFN/LNF), Franz-Josef Decker, Mark Hogan, Richard Iverson, Robert Siemann, Dieter Walz (SLAC, Menlo Park, California), Brent Blue, Chris Clayton, Evan Dodd, Chan Joshi, Kenneth Marsh, Warren Mori, Shouquin Wang (UCLA)

TPAE036—First Results of the CRFQ Proof of Principle

Alessandro Ruggiero, James Alessi, Vincent Lo Destro (BNL), Maria Rosaria Masullo (INFN-Napoli), Luigi Campajola, Vittorio Giorgio Vaccaro (Naples University Federico II), Daniele Davino (Universita' degli Studi del Sannio)

TPAE037—Numerical Simulations of the Laser Acceleration Experiment at the Femilab/NICADD Photoinjector Laboratory

Philippe Regis-Guy Piot (Fermilab), Adrian C. Melissinos, Rodion Tikhoplav (Rochester University)

TPAE038—Particle-in-Cell Simulation of LWFA Using 50 fs Pulses in Guided and Unguided Plasmas

Frank Shih Yu Tsung, Ricardo Fenseca, Chan Joshi, Wei Lu, Warren Mori, Luis O Silva, Michail TZOUFRAS (UCLA)

TPAE039—The Effects of Ion Motion in Very Intense Beam-Driven Plasma Wakefield Accelerators

James Rosenzweig, Alan Cook, Matthew Colin Thompson, Rodney Yoder (UCLA)

TPAE040—Nonlinear Theory in the Blowout Regime for Both Particle Beam and Laser Drivers
Wei Lu, Ricardo Fenseca, Chengkun Huang, Warren Mori, Luis O Silva, Frank Shih Yu Tsung, Michail Tzoufras, Miaomiao Zhou (UCLA), Tom Katsouleas (USC)

TPAE041—Modeling TeV Class Plasma Afterburners
Chengkun Huang, Chris Clayton, Johnson Devon, Chan Joshi, Wei Lu, Warren Mori, Miaomiao Zhou (UCLA), Christopher Barnes, Franz-Josef Decker, Mark Hogan, Richard Iverson, Caolionn O'Connell (SLAC), Suzhi Deng, Tom Katsouleas, Patric Muggli, Erdem Oz (USC)

TPAE042—Beam Matching to a Plasma Wake Field Accelerator Using a Ramped Density Profile at the Plasma Boundary
Kenneth Marsh, Chris Clayton, Chengkun Huang, Devon K. Johnson, Chan Joshi, Wei Lu, Warren Mori, Miaomiao Zhou (UCLA), Christopher Barnes, Franz-Josef Decker, Mark Hogan, Richard Iverson, Patrick Krejcik, Caolionn O'Connell, Robert Siemann, Dieter Walz (SLAC), Suzhi Deng, Tom Katsouleas, Patric Muggli, Erdem Oz (USC)

TPAE043—Production of Terahertz Seed Radiation for FEL/IFEL Microbunchers for Second Generation Plasma Beatwave Experiments in Neptune
Joseph Ralph, Chan Joshi, James Rosenzweig, Chieh Sung, Sergei Tochitsky (UCLA)

TPAE044—Terahertz IFEL/FEL Microbunching for Plasma Beatwave Accelerators
Chieh Sung, Chan Joshi, Pietro Musumeci, Claudio Pellegrini, Sven Reiche, James Rosenzweig, Sergei Tochitsky (UCLA)

TPAE045—Is it Possible To Generate nC, Mono-Energetic Electron Beams at 1GeV and Beyond Using Existing or Near Term Lasers via LWFA?
Michail Tzoufras, Ricardo A. Fonseca, Wei Lu, Warren Mori, Luis O Silva, Frank Shih Yu Tsung (UCLA)

TPAE046—Modeling Self-Ionized Plasma Wakefield Acceleration for Afterburner Parameters Using QuickPIC
Miaomiao Zhou, Chris Clayton, Viktor K. Decyk, Johnson Devon, Chengkun Huang, Chan Joshi, Wei Lu, Warren Mori, Frank Shih Yu Tsung (UCLA), Christopher Barnes, Franz-Josef Decker, Richard Iverson, Caolionn O'Connell, Dieter Walz (SLAC), Suzhi Deng, Tom Katsouleas, Patric Muggli, Erdem Oz (USC)

TPAE047—Parameters Optimization for a Novel Vacuum Laser Acceleration Test at BNL-ATF
Lei Shao, David Cline, Feng Zhou (UCLA)

TPAE048—The UCLA/FNPL Time Resolved Underdense Plasma Lens Experiment
Matthew Colin Thompson, James Rosenzweig, Gil Travish (UCLA), Helen Edwards, Philippe Regis-Guy Piot, James Santucci (Fermilab), Rodion Tikhoplav (Rochester University)

TPAE049—The UCLA/SLAC Ultra-High Gradient Cerenkov Wakefield Accelerator Experiment
Matthew Colin Thompson, Hristo Badakov, James Rosenzweig, Gil Travish, Rodney Yoder (UCLA), Mark Hogan, Rasmus Ischebeck, Robert Siemann, Dieter Walz (SLAC), Patric Muggli (USC)

TPAE050—Optical Injection Through Oblique Collisions
John R. Cary (CIPS), Eric Esarey, Wim Leemans (LBNL), David L. Bruhwiler, Rodolfo Giaccone, Chet Nieter (Tech-X)

TPAE051—Designing Photonic Crystal Devices for Accelerators
Gregory Werner (CIPS), John R. Cary (CIPS; Tech-X, Boulder)

TPAE052—Near-GeV Electron Beams from the Laser Wakefield Accelerator in the “Bubble” Regime
Nasr Hafz, Guang-Hoon Kim, Hyyong Suk (KERI)

TPAE053—Near-GeV Electron Beams from the Laser Wakefield Accelerator in the “Bubble” Regime
Nasr Hafz, Guang-Hoon Kim, Hyyong Suk (KERI), Il Woo Choi, Do-Kyeong Ko, Jongmin Lee (APRI-GIST)

TPAE054—Ultraintense and Ultrashort Laser Pulses from Raman Amplification in Plasma for Laser-Plasma Accelerators
Min Sup Hur, Nasr Hafz, Guang-Hoon Kim, Victor V. Kulagin, Ki-Hong Pae, Hyyong Suk (KERI), Changbum Kim (POSTECH)

TPAE055—Laser-Based Electron Acceleration Experiment in KERI/APRI-GIST
Guang-Hoon Kim, Nasr Hafz, Hyyong Suk (KERI), Il Woo Choi, Do-Kyeong Ko, Jongmin Lee, T. J. Yu (APRI-GIST)

TPAE056—Acceleration of Charged Particles by High Intensity Few-Cycle Laser Pulses
Ulrich Schramm, Florian Gruener, Dietrich Habs, Jörg Schreiber (LMU), Michael Geissler, Ferenc Krausz, Juergen Stein, George Tsakiris, Laszlo Veisz, Klaus Witte (MPQ)

TPAE057—A Multibunch Plasma Wakefield Accelerator

Efthymios Kallos, Tom Katsouleas, Patric Muggli (USC), Ilan Ben-Zvi, Igor Pogorelsky, Vitaly Yakimenko (BNL), Wayne D. Kimura (STI)

TPAE058—Plasma Dark Current in Plasma Wake Field Accelerators (PWFA)

Erdem Oz, Suzhi Deng, Tom Katsouleas, Patric Muggli (USC), Franz-Josef Decker, Mark Hogan, Richard Iverson, Patrick Krejcik, Caolionn O'Connell, Dieter Walz (SLAC), Chris Clayton, Chengkun Huang, Devon K. Johnson, Chan Joshi, Wei Lu, Kenneth Marsh, Miaomiao Zhou (UCLA)

TPAE059—Towards Ultra-Bright Electron Bunches Using Pancakes, Waterbags, and Cold Atoms
Jom Luiten (TUE)

TPAE060—Planned Enhanced Wakefield Transformer Ratio Experiment at Argonne Wakefield Accelerator

Alex Kanareykin (Euclid Concepts, LLC), Wei Gai, Richard Konecny, John Gorham Power, Haitao Wang (ANL)

TPAE061—Experimental Investigation of an X-Band Tunable Dielectric Accelerating Structure

Alex Kanareykin, Pavel Avrakov, Sergei Fedorovich Karmanenko (Euclid Concepts, LLC), Wei Gai, John Gorham Power (ANL)

TPAE062—Simulation of the Collective Acceleration of 100 Picosecond Ion Pulses with the Ionization Front Accelerator

Dale Welch, David Rose (ATK-MR), Craig Olson (Sandia National Laboratories)

TPAE063—Observation of Superposition of Wake Fields Generated by Electron Bunches in a Dielectric-Lined Waveguide

Sergey V. Shchelkunov, Thomas C. Marshall (Columbia University), Marcus Babzien (BNL), Jay L. Hirshfield (Omega-P, Inc.; Yale University), Michael A. LaPointe (Yale University)

TPAE064—Externally Controlled Injection of Electrons by a Laser Pulse in a Laser Wakefield Electron Accelerator

Szu-Yuan Chen, Chun-Ling Louis Chang, Wei-Ting Chen, Ting-Yei Chien, Chau-Hwang Lee, Jiunn-Yuan Lin, Jyhpyng Wang (IAMS)

TPAE065—Development of a 20-MeV Dielectric-Loaded Accelerator Test Facility

Steven H. Gold (NRL), Wei Gai, Chunguang Jing, Richard Konecny, John Gorham Power (ANL), Allen Kinkead (LET), Christopher Dennis Nantista, Sami

G. Tantawi (SLAC), Huaibi Chen, Yuan Hu, Y. Lin, C. Tang (TUB)

TPAE066—Robust Autoresonant Excitation in the Plasma Beat-Wave Accelerator: A Theoretical Study
Andrew Emile Charman, Ryan Roger Lindberg (UCB), Jonathan Wurtele (LBNL/CBP), Lazar Friedland (The Hebrew University of Jerusalem)

Poster Session TPAP—High-Energy Hadron Accelerators and Colliders, Park Concourse, 8:30–12:20

TPAP001—Crystal Bending of LHC Beam for In-Situ Calibration of CMS/ATLAS Calorimeters
Valery M. Biryukov, Yuri Chesnokov (IHEP Protvino), Stefano Bellucci (INFN/LNF)

TPAP002—Summary of Recent Studies of Cryosorbers for LHC Long Straight Sections
Rodion Dostovalov, Vadim Anashin, Alexandre Krasnov (BINP SB RAS)

TPAP003—Exploring a Nonlinear Collimation System for the LHC
Javier Resta, Angeles Faus-Golfe (IFIC), Ralph Assmann, Stefano Redaelli, Guillaume Robert-Demolaize, Daniel Schulte, Frank Zimmermann (CERN)

TPAP004—Mechanical Design for Robustness of the LHC Collimators
Alessandro Bertarelli, Oliver Aberle, Ralph Assmann, Sergio Calatroni, Alessandro Dallocchio, Tadeusz Kurtyka, Manfred Mayer, Roger Perret, Stefano Redaelli, Guillaume Robert-Demolaize (CERN)

TPAP005—Calculation of Residual Dose Rates and Intervention Scenarios for the LHC Beam Cleaning Insertions—Constraints and Optimization
Markus Brugger, Oliver Aberle, Ralph Assmann, Doris Forkel-Wirth, Stefan Roesler, Helmut Vincze (CERN)

TPAP006—Detecting Impacts of Proton Beams on the LHC Collimators With Vibration Measurements
Stefano Redaelli, Oliver Aberle, Ralph Assmann, Alessandro Masi (CERN), Giovanni Spiezia (Naples University Federico II)

TPAP007—LHC Collimation: Design and Results from Prototyping and Beam Tests
Ralph Assmann, Oliver Aberle, Gianluigi Arduini,

Alessandro Bertarelli, Markus Brugger, Helmut Burkhardt, Sergio Calatroni, Fritz Caspers, Enrico Chiaveri, Bernd Dehning, Alfredo Ferrari, Eva Barbara Holzer, Jean-Bernard Jeanneret, José Miguel Jimenez, Alessandro Masi, Manfred Mayer, Elias Métral, Roger Perret, Christian Rathjen, Stefano Redaelli, Guillaume Robert-Demolaize, Stefan Roesler, Daniel Schulte, Peter Sievers, Vasilis Vlachoudis, Jorg Wenninger (CERN), Igor Baishev (IHEP Protvino), Giovanni Spiezia (Naples University Federico II)

TPAP008—Measurements of the LHC Collimator Impedance with Beam in the SPS

Helmut Burkhardt, Gianluigi Arduini, Ralph Assmann, Fritz Caspers, Marek Gasior, Rhodri Jones, Tom Kroyer, Elias Métral, Stefano Redaelli, Guillaume Robert-Demolaize, Federico Roncarolo, Daniel Schulte, Ralph Steinhagen, Jorg Wenninger, Frank Zimmermann (CERN)

TPAP009—Collimation in the Transfer Lines to the LHC

Helmut Burkhardt, Brennan Goddard, Yacine Kadi, Verena Kain, Thys Risselada, Wim Weterings (CERN)

TPAP010—Reliability Analysis of the LHC Beam Dumping System

Roberto Filippini, Etienne Carlier, Brennan Goddard, Jan Uythoven (CERN)

TPAP011—Reliability Assessment of the LHC Machine Protection Systems

Roberto Filippini, Bernd Dehning, Gianluca Guaglio, Felix Rodriguez-Mateos, Ruediger Schmidt, Benjamin Todd, Jan Uythoven, Antonio Vergara-Fernández, Markus Zerlauth (CERN)

TPAP012—Heavy-Ion Luminosity Limit from Bound-Free Pair Production in the LHC

John M. Jowett, Roderik Bruce, Simone Silvano Gilardoni (CERN)

TPAP013—The Performance of the New TCDQ System in the LHC Beam Dumping Region

Andrew Presland, Brennan Goddard, Wim Weterings (CERN)

TPAP014—Energy Deposition Studies for the Betatron Cleaning Insertion

Vasilis Vlachoudis, Ralph Assmann, Alfredo Ferrari, Matteo Magistris, Mario Santana-Leitner, Ekaterini Tsoulou (CERN)

TPAP015—Commissioning of the LHC Beam Transfer Line TI 8

Jan Uythoven, Gianluigi Arduini, Brennan Goddard,

Delphine Jacquet, Verena Kain, Mike Lamont, Volker Mertens, Alan Spinks, Jorg Wenninger (CERN), Yu-Chiu Chao (Jefferson Lab)

TPAP016—Energy Calibration of the SPS with Proton and Lead Ion Beams

Jorg Wenninger, Gianluigi Arduini, Claudio Arimatea, Thomas Bohl, Paul Collier, Karel Cornelis (CERN)

TPAP017—Beam Stability of the LHC Beam Transfer Line TI8

Jorg Wenninger, Brennan Goddard, Verena Kain, Jan Uythoven (CERN)

TPAP018—Optics Studies of the LHC Beam Transfer Line TI8

Jorg Wenninger, Gianluigi Arduini, Brennan Goddard, Delphine Jacquet, Verena Kain, Mike Lamont, Volker Mertens, Jan Uythoven (CERN), Yu-Chiu Chao (Jefferson Lab)

TPAP019—Aperture Studies of the SPS to LHC Transfer Lines

Brennan Goddard, Verena Kain, Riccardo Schmid (on leave), Jorg Wenninger (CERN)

TPAP020—Beam Test of a Roman Pot Prototype for the TOTEM Experiment

Mario Deile, Fritz Caspers, Karsten Eggert, Friedrich Haug, Pierre Jarrou, Daniela Macina, Hubert Niewiadomski, Elias Philippe Noschis, Marco Oriunno, Anne-Laure Perrot, Gennaro Ruggiero, Walter Snoeys, Andre Verdier (CERN), Cinzia Da Vià, Jasmine Hasi, Angela Kok, Stephen Watts (Brunel University), Vojtech Kundrát, Milos Vaclav Lokajicek (FZU), Valentina Avati, Erik Goussev, Matti Järvinen, Juha Kalliopuska, Kari Kurvinen, Rauno Lauhakangas, Fredrik Oljemark, Risto Orava, Kenneth Österberg, Vittorio Palmieri, Heimo Saarikko, Stefan Tapprogge, Arto Mika Toppinen (Helsinki University), Ralf Herzog, Rainer Rudischer, Eberhard Wobst (ILK Dresden), Vittorio Boccone, Marco Bozzo, Alberto Buzzo, Stefano Cuneo, Fabrizio Ferro, Mario Macri, Saverio Minutoli, Aldo Morelli, Paolo Musico, Marco Negri, Alberto Santroni, Giuseppe Sette, Andrei Sobol (INFN Genova), Vincenzo Berardi, Maria Gabriella Catanesi, Emilio Radicioni (INFN-Bari)

TPAP021—Schemes for Producing High Intensity Low-Longitudinal Emittance Proton Bunches for the pp and ppbar Colliders

Chandra Bhat (Fermilab)

TPAP022—2.5 MHz pbar Bunch Transfer from Accumulator and Recycler to the Fermilab Main Injector and pbars to the Tevatron ppbar Collider

Chandra Bhat, David Capista, Brian Chase, Joseph Dey, Ioannis Kourbanis, Kiyomi Seiya, Vincent Wu (Fermilab)

TPAP023—High Intensity Beam Studies in the Recycler: Simulations and Beam Measurements
Chandra Bhat (Fermilab)

TPAP024—Decoupling Schemes for the Tevatron in the Presence of Skew Quad Fields
Carol Johnstone, Pavel Snopok (Fermilab), Martin Berz (MSU)

TPAP025—Energy Deposition Constraints on LHC IR Design at the Upgraded Luminosity
Nikolai V. Mokhov, Tanaji Sen, James Strait (Fermilab)

TPAP026—Improving the Tevatron Collision Helix
Ronald Moore, Yuri Alexahin, John Johnstone, Tanaji Sen (Fermilab)

TPAP027—Deterioration of the Skew Quadrupole Moment in Tevatron Dipoles Over Time
Michael James Syphers, David J. Harding (Fermilab)

TPAP028—Observations of Strong Transverse Coupling in the Tevatron
Michael James Syphers, Gerald Annala, Donald Edwards, Norman Gelfand, John Johnstone, Michael A. Martens, Tanaji Sen (Fermilab)

TPAP029—Measurements of Field Decay and Snapback Effect on Tevatron Dipole and Quadrupole Magnets
Gueorgui Velev, Giorgio Ambrosio, Jerry Annala, Pierre Bauer, Ruben H. Carcagno, Joseph DiMarco, Robert Kephart, Michael Joseph Lamm, Michael A. Martens, Phil Schlabach, Mike Tartaglia, John Tompkins (Fermilab)

TPAP030—Tevatron Alignment Issues 2003-2004
James T. Volk, Jerry Annala, Luciano Elementi, Norman Gelfand, Keith Gollwitzer, John A. Greenwood, Michael A. Martens, Craig Damon Moore, Alfred Nobrega, Allison Russell, Terry Sager, Vladimir Shiltsev, Raymond Stefanski, Michael James Syphers, George Wojcik (Fermilab)

TPAP031—Simulations of an Acceleration Scheme for Producing High Intensity and Low Emittance Antiproton Beam for Fermilab Collider Operation
Vincent Wu, Chandra Bhat, James Angell Mac Lachlan (Fermilab)

TPAP032—The Experiments and Operation of the 1st Tevatron Electron Lens

Xiaolong Zhang, Vladimir Shiltsev (Fermilab, Batavia, Illinois), Kip Bishofberger (UCLA)

TPAP033—Tevatron Acceptance Measurement
Xiaolong Zhang, Vladimir Shiltsev, Cheng-Yang Tan (Fermilab)

TPAP034—Analysis of Tevatron Beam Loss Scenario and Mitigation for TEVB Pixel Detector
Xiaolong Zhang, Michael Church, Vladimir Shiltsev (Fermilab)

TPAP035—Energy Deposition Issues at 8 GeV H-Beam Collimation and Injection to the Fermilab Main Injector
Alexandr I. Drozhdin, Mikhail A. Kostin, Nikolai V. Mokhov (Fermilab)

TPAP036—Fitting the Luminosity Decay in the Tevatron
Elliott McCrory, Anna Jean Slaughter, Aimin Xiao (Fermilab)

TPAP037—Monte Carlo of Tevatron Operations, Including the Recycler
Elliott McCrory (Fermilab)

TPAP038—Characterizing Luminosity Evolution in the Tevatron
Elliott McCrory, Vladimir Shiltsev, Anna Jean Slaughter, Aimin Xiao (Fermilab)

TPAP040—Feasibility Study of Beam-Beam Compensation in the Tevatron with Wires
Tanaji Sen (Fermilab), Béla Erdélyi (Northern Illinois University)

TPAP041—Simulations of Beam-Beam Phenomena in the Tevatron with BBSIM
Tanaji Sen, Vinay Boochra (Fermilab)

TPAP042—Luminosity Limits Due to Intra-Beam and Background
Yaroslav Derbenev, Andrei Afanasev, Yuhong Zhang (Jefferson Lab)

TPAP043—Electron Cooling of RHIC
Ilan Ben-Zvi, Donald Barton, Dana Beavis, Michael Blaskiewicz, Joseph Michael Brennan, Andrew Burrill, Rama Calaga, Peter Cameron, Xiangyun Chang, Roger Connolly, Yury Isaakovich Eidelman, Alexei V. Fedotov, Wolfram Fischer, David Mark Gassner, Harald Hahn, Michael Harrison, Ady Hershcovitch, Hsiao-Chaun Hseuh, Animesh Kumar Jain, Peter Johnson, Dmitry Kayran, Jorg Kewisch, Robert Lambiase, Vladimir N. Litvinenko, William W. MacKay, George Mahler, Nikolay Malitsky, Gary

McIntyre, Wuzheng Meng, Kerry Mirabella, Christoph Montag, Thomas Nehring, Tony Nicoletti, Brian Oerter, George Parzen, David Pate, Jim Rank, Triveni Rao, Thomas Roser, Thomas Russo, Joseph Scaduto, Kevin Smith, Dejan Trbojevic, Jie Wei, Neville Willaims, Kuo-Chen Wu, Vitaly Yakimenko, Alex Zaltsman, Yongxiang Zhao (BNL), Al Burger, Anthony Favale, Douglas Holmes (AES), Hans Bluem, Michael Cole, John Rathke, Tom Schultheiss, Alan Murray Melville Todd (AES), Ivan Koop, Vasily Parkhomchuk, Yuri Shatunov, Alexander Skrinsky (BINP SB RAS), Jacek Sekutowicz (DESY), Alexey Burov, Sergei Nagaitsev (Fermilab), Igor Meshkov, Anatoly Olegovich Sidorin, Alexander Smirnov, Grigory Troubnikov (JINR), Jean Roger Delayen, Yaroslav Derbenev, Warren Funk, Peter Kneisel, Lia Merminga, Larry Phillips, Joseph P. Preble (Jefferson Lab), Dan Tyler Abell, David L. Bruhwiler (Tech-X)

TPAP044—Observations of Snake Resonance in RHIC

Mei Bai, Haixin Huang, William Mac Kay, Vadim Ptitsyn, Thomas Roser, Steven Tepikian (BNL), Georg Hoffstaetter (Cornell University), Shyh-Yuan Lee, Fanglei Lin (IUCF)

TPAP045—Localizing Sources of Horizontal Orbit Oscillations at RHIC

Rama Calaga, Christoph Montag, Thomas Roser, Todd Satogata (BNL)

TPAP046—Measurements of the Total Cu-Cu Cross Section at RHIC

Angelika Drees (BNL)

TPAP047—Longitudinal and Transverse Vertex Distributions at RHIC

Angelika Drees, Roger Connolly, Roger C. Lee, Seth Nemesure (BNL)

TPAP048—Optimization of the Phase Advance Between RHIC Interaction Points

Rogelio Tomas, Wolfram Fischer (BNL)

TPAP049—Beam Pipe Desorption Rate in RHIC

Haixin Huang, Wolfram Fischer, Ping He, Hsiao-Chaun Hseuh, Ubaldo Iriso, Vadim Ptitsyn, Dejan Trbojevic, Jie Wei, S.Y. Zhang (BNL)

TPAP050—RHIC Luminosity with Larger Tune Advance in FODO Cells

Vladimir N. Litvinenko, Mei Bai, Joanne Beebe-Wang, Peter Cameron, Roger Connolly, Angelika Drees, Alexei V. Fedotov, Wolfram Fischer, George Ganetis, Haixin Huang, Dmitry Kayran, Jorg Kewisch, Yun Luo, William W. MacKay, Nikolay

Malitsky, Christoph Montag, George Parzen, Fulvia C. Pilat, Vadim Ptitsyn, Thomas Roser, Alessandro Ruggiero, Todd Satogata, Steven Tepikian, Dejan Trbojevic, Kurt Vetter, Jie Wei (BNL)

TPAP051—Principle of Global Decoupling with Coupling Phase Modulation

Yun Luo, Fulvia C. Pilat, Thomas Roser, Dejan Trbojevic (BNL)

TPAP052—Phase Loop for Global Betatron Decoupling

Yun Luo, Peter Cameron, Al DellaPenna, Al Marusic, Steve Peggs, Dejan Trbojevic (BNL)

TPAP053—RHIC IP Optics Measurements

Yun Luo, Mei Bai, Fulvia C. Pilat, Todd Satogata, Dejan Trbojevic (BNL)

TPAP054—Helium Flow Induced Orbit Jitter at RHIC

Christoph Montag, Tony Nicoletti, Todd Satogata (BNL)

TPAP055—Fast IR orbit feedback at RHIC

Christoph Montag, Al Marusic, Robert Michnoff, Thomas Roser, Carl Schultheiss (BNL)

TPAP056—Electron Beam Stability Requirements for Linac-Ring Electron-Ion Colliders

Christoph Montag (BNL)

TPAP057—Beam-Beam Simulations for the eRHIC Electron Ring

Christoph Montag (BNL)

TPAP058—Beam-Beam Simulations for Double-Gaussian Beams

Christoph Montag, Ilan Ben-Zvi, Vladimir N. Litvinenko, Nikolay Malitsky (BNL)

TPAP059—Progress in Polarized Protons Above 100 GeV Energy in RHIC

Vadim Ptitsyn, Mei Bai, Haixin Huang, William W. MacKay, Thomas Roser (BNL)

TPAP060—Survey of RHIC Misalignments

Vadim Ptitsyn, F. M. Hemmer, Francis Karl, Charles Spataro, Dejan Trbojevic (BNL)

Poster Session TPAT—Multiparticle Beam Dynamics, Extreme Beams, & High-Energy Hadron Accelerators and Colliders
Meeting Room 200 A-C, 8:30-12:20

TPAT001—A Source for Non-Relativistic Electrons Approaching the Brightness Quantum Limit

Max Zolotorev, Peter Denes, Zahid Hussain, Gennadi Lebedev, Steven M. Lidia, David Robin, Fernando Sannibale, Robert W. Schoenlein, Robert Vogel (LBNL), Eugene Commins (UCB)

TPAT002—Three-Dimensional Simulation of Large-Aspect-Ratio Ellipse-Shaped Charged-Particle Beam Propagation

Ronak Bhatt, Chiping Chen, Jing Zhou (MIT/PSFC)

TPAT003—Cold-Fluid Equilibrium of a Large-Aspect-Ratio Ellipse-Shaped Charged-Particle Beam in a Non-Axisymmetric Periodic Permanent Magnet Focusing Field

Jing Zhou, Ronak Bhatt, Chiping Chen (MIT/PSFC)

TPAT004—Strongly Asymmetric Beams at the University of Maryland Electron Ring (UMER)

Santiago Bernal, Gang Bai, Rami Alfred Kishek, Hui Li, Patrick G O’Shea, Bryan Quinn, Mark Walter (IREAP), Martin Reiser (University Maryland)

TPAT005—Start to End Error Study for the SPIRAL2 Linac

Romuald Duperrier, Didier Uriot (CEA/DSM/DAPNIA)

TPAT006—Optics, Geometry and CSR-Related Emittance Growth in Bunch Compressor Chicanes

Torsten Limberg, Martin Dohlus (DESY)

TPAT007—RF Defocusing in Super-Conducting Structure with Constant Geometry

Yurij Senichev, Rudolf Maier, Nikita Vasyukhin (FZJ/IKP)

TPAT008—Numerical Dispersion Error Reduction in EM Calculations for Accelerators

Thomas Lau, Erion Gjonaj, Thomas Weiland, Igor Zagorodnov (TEMF, Darmstadt)

TPAT009—Physics in Induction Acceleration

Yoshito Shimosaki, Ken Takayama (KEK, Ibaraki), Kota Torikai (Kyushu University, Fukuoka)

TPAT010—Practical Definitions of Beam Lifetimes
in an Electron Storage Ring
Tae-Yeon Lee (PAL, Pohang)

TPAT011—Impedance Analysis of Longitudinal
Bunch Shape Measurements at PLS
*Ilmoon Hwang, Moohyun Yoon (POSTECH), Yeung-
Jin Han, Eun-San Kim (PAL)*

TPAT012—Space-Charge Effects Influence on Ion
Beam Dynamics in Undulator Linear Accelerator
*Eduard Sergeevich Masunov, Sergey Markovich
Polozov (MEPhI)*

TPAT013—Effects of Localization in Models of
Fusion/Energy Confinement in Plasma/Beam Physics
in BBGKY Framework
*Michael G Zeitlin, Antonina N. Fedorova (RAS/
IPME)*

TPAT014—A Novel Technique for Multiturn
Injection in a Circular Accelerator Using Stable
Islands in Transverse Phase Space
Massimo Giovannozzi, Julien Morel (CERN)

TPAT015—Simulations of Error-Induced Beam
Degradation in Fermilab's Booster Synchrotron
*Phil Sung Yoon (Rochester University), Weiren Chou
(Fermilab), Courtlandt L. Bohn (Northern Illinois
University; Fermilab)*

TPAT017—Impedance of Elliptical Tapered Vacuum
Chambers
Boris Podobedov (BNL/NSLS)

TPAT018—Stability of Barrier Buckets with Short
Rf-Barrier Separations
King Yuen Ng (Fermilab)

TPAT019—Discussions on the Cancellation Effect on
a Curved Orbit
Rui Li, Yaroslav Derbenev (Jefferson Lab)

TPAT020—CSR Interaction at the Cross-Over of the
Full Compression Point in a Magnetic Chicane
Rui Li (Jefferson Lab)

TPAT021—Analysis of the Effective CSR Forces for
an Energy-Chirped Bunch on a Circular Orbit
Rui Li (Jefferson Lab)

TPAT022—Future Plans for the Small Isochronous
Ring
*Eduard Pozdeyev (Jefferson Lab), Felix Marti, Jose
Alberto Rodriguez, Richard York (NSCL)*

TPAT023—Tests of a 3D Self Magnetic Field Solver in the Finite Element Gun Code MICHELLE
Eric Michael Nelson (LANL), John Petillo (SAIC)

TPAT024—Drift-Compression Simulations for Heavy-Ion Fusion
William M. Sharp, John J. Barnard, David Grote (LLNL), C. M. Celata (LBNL)

TPAT025—RIA Post Accelerator Beam Dynamics Issues

Stan Owen Schriber (NSCL), Robert Garnett, Thomas Wangler (LANL/LANSCE), Kenneth Crandall (TechSource)

TPAT026—Synergia: An Advanced Object-Oriented Framework for Beam Dynamics Simulation
Douglas Ricker Dechow, Peter Stoltz (Tech-X), James Frederick Amundson, Panagiotis Spentzouris (Fermilab)

TPAT027—Measurement of Transverse Echoes in RHIC

Wolfram Fischer, Todd Satogata, Rogelio Tomas (BNL)

TPAT028—TRACK: The New Beam Dynamics Code

Brahim Mustapha, Vladislav Aseev, Eliane Schnirman Lessner, Peter Ostroumov (ANL)

TPAT029—RIA Beam Dynamics: Comparing TRACK to IMPACT

Brahim Mustapha, Vladislav Aseev, Peter Ostroumov (ANL), Ji Qiang, Robert Ryne (LBNL/CBP)

TPAT030—Transverse Beam Matching Application for SNS

Chungming Chu, Viatcheslav V. Danilov, Dong-o Jeon, Michael Plum (ORNL/SNS)

TPAT031—Painting Self-Consistent Beam Distributions in Rings

Jeffrey Alan Holmes, Sarah M. Cousineau, Viatcheslav V. Danilov (ORNL/SNS)

TPAT032—Transverse Stability Studies of the SNS Ring

Jeffrey Alan Holmes, Viatcheslav V. Danilov (ORNL/SNS), Lalit Kumar Jain (UW/Physics)

TPAT033—Experimental Characteristics of Transverse 4-D Beam's Phase Spaces at Bunch Compression

Feng Zhou, David Cline, James Rosenzweig (UCLA), Vitaly Yakimenko (BNL)

TPAT034—Manipulations of Double Beams in One RF Period for STELLA SM-LWFA Experiment
Feng Zhou, David Cline (UCLA), Marcus Babzien, Vitaly Yakimenko (BNL), Wayne D. Kimura (STI)

TPAT035—Coherent Synchrotron Radiation from an Electron Beam in a Curved Waveguide
David Gillingham, Tom Antonsen, Patrick G O'Shea (IREAP)

TPAT036—Ferroelectric Plasma Source for Heavy Ion Beam Charge Neutralization
Philip Efthimion, Ronald Davidson, Erik P. Gilson, Larry Grisham (PPPL), B. Grant Logan, William Waldron, Simon Yu (LBNL)

TPAT037—Simulating the Long-Distance Propagation of Intense Beams in the Paul Trap Simulator Experiment
Erik P. Gilson, Moses Chung, Ronald Davidson, Philip Efthimion, Richard Majeski, Edward Startsev (PPPL)

TPAT038—Chaos in Time-Dependent Space-Charge Potentials
Gregory Thomas Betzel, Courtlandt L. Bohn, Ioannis V. Sideris (Northern Illinois University)

TPAT039—Wavelet-Based Poisson Solver for Use in Particle-in-Cell Simulations
Balsa Terzic, Daniel Mihalcea (Northern Illinois University), Ilya V Pogorelov (LBNL)

TPAT040—On the Study of Actual Stationary State for Plasma Lens
Vladimir Fotievich Zadorozhny (NASU/IOC), Zohreh Parsa (BNL), Alexey Goncharov (NSC/KIPT)

TPAT041—On the Vlasov-Maxwell Equation
Vladimir Fotievich Zadorozhny (NASU/IOC), Zohreh Parsa (BNL), Alexey Goncharov (NSC/KIPT)

TPAT042—Coherent Synchrotron Radiation from Arbitrary Planar Orbits: A Vlasov Approach
Gabriele Bassi, James A. Ellison (UNM), Robert Warnock (SLAC)

TPAT043—The MICHELLE 2D/3D ES PIC Code: Advances and Applications
John Petillo, Norman John Dionne, Kenneth Eppley, Dimitrios Panagos, Xiaoling Zhai (SAIC), Eric Michael Nelson (LANL), Baruch Levush (NRL), Liya Chernyakova, John F. DeFord, Ben Held (STAR, Inc.)

TPAT044—Reduced Models of Backstreaming Ion Behavior in Radiographic Accelerators
James F. McCarrick (LLNL)

TPAT045—Equilibrium and Stability in the Transport of Intense Off-Axis Beams in Periodic Focusing Systems

Renato Pakter, Jorge da Silva Moraes, Felipe Rizzato (IF-UFRGS)

TPAT046—Nonlinear Stability of Intense Mis-matched Beams in a Uniform Focusing Field

Renato Pakter, Felipe Rizzato, Wilson Simeoni (IF-UFRGS)

TPAT047—Space Charge Compensation Studies of Low Energy Hydrogen Ion Beams

Ahmed BenIsmail, Romuald Duperrier, Didier Uriot (CEA/DSM/DAPNIA), Nicolas Pichoff (CEA/DAM)

TPAT048—The Transverse Nonlinear Tune Shift as Stabilising Factor in Halo Creation in Space Charge Dominated Beam

Nikita Vasyukhin, Yurij Senichev, Raimund Tölle (FZJ/IKP)

TPAT049—Comparison of Beam Dynamic in Different Superconducting Options of Low Energy High Intense Linac

Nikita Vasyukhin, Yurij Senichev, Raimund Tölle (FZJ/IKP)

TPAT050—Beam Dynamics Design of the L3BT for J-PARC

Tomohiro Ohkawa (JAERI, Ibaraki-ken), Masanori Ikegami (KEK)

TPAT051—Asymmetrical Spectrum Observed at the KEKB High Energy Electron Ring

Takao Ieiri, Yukiyoshi Ohnishi, Makoto Tobiyama (KEK)

TPAT052—High Current Beam Dynamics in Lebedev Physical Institute Racetrack Microtron

Vyacheslav Kurakin, Alexander Vladimirovich Koltsov (LPI)

TPAT053—Zoo of Patterns in Collective Vlasov-Maxwell Dynamics

Antonina N. Fedorova, Michael G. Zeitlin (RAS/IPME)

TPAT054—Dispersion Matching of a Space Charge Dominated Beam at Injection into the CERN PS Booster

Klaus Hanke, Jorge Sanchez-Conejo, Richard Scrivens (CERN)

TPAT055—On Start to End Simulation and Modeling Issues of the Megawatt Proton Beam Facility at PSI

Andreas Adelmann, Stefan Adam, Hansruedi Fitze, Roman Geus, Martin Humbel, Lukas Stingelin (PSI)

TPAT056—Dynamics of High-Current Ion Beams in the Accelerator Combining APF and RFQD
Vasilij Bomko, Zinaida Ptukhina, Sergej Tishkin (NSC/KIPT)

TPAT057—Observations of UHF Oscillations in the IPNS RCS Proton Bunch
Jeffrey Craig Dooling, Gerald McMichael, Shaoheng Wang (ANL)

TPAT058—Calculation of Electron Beam Potential Energy from RF Photocathode Gun
Wanming Liu, Wei Gai, John Gorham Power, Haitao Wang (ANL)

TPAT059—Space Charge Experiments and Simulation in the Fermilab Booster
James Frederick Amundson, Panagiotis Spentzouris (Fermilab)

TPAT060—Overview of the Synergia 3-D Multi-Particle Dynamics Modeling Framework, Including Benchmarks and Applications
Panagiotis Spentzouris, James Frederick Amundson (Fermilab), Douglas Ricker Dechow (Tech-X)

TPAT061—Accurate Iterative Analysis of K-V Equations for a Matched Beam
Oscar A. Anderson (LBNL)

TPAT062—Uncorrelated Energy Spread and Longitudinal Emittance for a Photoinjector Beam
Zhirong Huang, Paul Emma, Cecile Limborg-Deprey, Gennady Stupakov, Juhao Wu (SLAC)

TPAT063—Analysis of Longitudinal Space Charge Effects with Radial Dependence
Juhao Wu, Paul Emma, Zhirong Huang (SLAC)

TPAT064—Measurement of Head-Tail Instability Parameters with a Fast Strip-Line Pickup in the Tevatron
Vahid Houston Ranjbar, Petr Mikhailovich Ivanov (Fermilab)

TPAT065—Damping Transverse Instabilities in the Tevatron Using AC Chromaticity
Vahid Houston Ranjbar (Fermilab)

TPAT066—Theory and Simulations for UMER Commissioning
Rami Alfred Kishek, Gang Bai, Santiago Bernal, Terry Godlove, Irving Haber, Bryan Quinn, Mark Walter (IREAP), Patrick G. O'Shea (IREAP; University Maryland), Martin Reiser (University Maryland)

TPAT067—Study of Longitudinal Space-Charge Wave Dynamics in Space-Charge Dominated Beams

Kai Tian, Yupeng Cui, Irving Haber, Yijie Huo, Rami Alfred Kishek, Patrick G. O'Shea, Yun Zou (IREAP), Martin Reiser (University Maryland)

TPAT068—LSP Numerical Simulations of the Neutralized Drift Compression Experiment
Adam Sefkow, Ronald Davidson (PPPL), Dale Welch (ATK-MR), Simon Yu (LBNL)

TPAT069—Darwin Model for Intense Charged Particle Beams
Edward Startsev, Ronald Davidson, Wei-li Lee (PPPL)

TPAT070—Intensity and Bunch-Shape Dependent Beam Loss Simulation for the SIS100
Giuliano Franchetti, Ingo Hofmann, Peter J. Spiller (GSI)

TPAT071—Induced Voltage from Coherent Synchrotron Radiation (CSR) in a Toroidal Chamber
Robert Warnock (SLAC), Marco Venturini (LBNL)

TPAT072—Lifetime Studies for the Tevatron at Collision Energy
Andreas C. Kabel, Yunhai Cai (SLAC), Tanaji Sen, Vladimir Shiltsev (Fermilab)

TPAT073—A New Field Solver for TraFiC4
Andreas C. Kabel (SLAC), Martin Dohlus, Torsten Limberg (DESY)

TPAT074—PIC Simulation of the Strong-Strong Beam-Beam Interaction Including Parasitic Crossings
Andreas C. Kabel, Yunhai Cai (SLAC)

TPAT075—The Design of IH-Linac Including Dipole Effect
Taku Ito, Toshiyuki Hattori, Noriyosu Hayashizaki, Kazuo Yamamoto (RLNR), Masahiro Okamura (RIKEN)

TPAT076—Measurement of the Luminous-Region Profile at the PEP-II IP, and Application to e+/- Bunch-Length Determination
Benoit Francis Viaud (Montreal University), Witold Kozanecki (CEA/DSM/DAPNIA), Chris O'Grady, Amedeo Perazzo (SLAC)

TPAT077—Beam-Beam Study on the Upgrade of Beijing Electron Positron Collider
Sheng Wang (IHEP Beijing)

TPAT078—Coherent Beam-Beam Modes in the LHC for Multiple Bunches, Different Collisions Schemes and Machine Symmetries
Werner Herr, Tatiana Pieloni (CERN)

TPAT079—Multipole Compensation of Long-Range Beam-Beam Interactions In Tevatron
Jack Shi, Ben Anhalt (KU)

TPAT080—Diffusion Due to Beam-Beam Resonances in Hadron Colliders
Yuri Alexahin (Fermilab)

TPAT081—Beam Loss and Profile Evolution Under Intra-Beam Scattering in RHIC: Theory and Experiments

Jie Wei, Alexei V. Fedotov, Wolfram Fischer, Nikolay Malitsky (BNL), Ji Qiang (LBNL)

TPAT082—Phonon Modes and the Maintenance Condition of a Crystalline Beam

Jie Wei (BNL), Hayato Enokizono, Hiromi Okamoto, Yosuke Yuri (HU/AdSM), Andrew Sessler (LBNL), Xiao-Ping Li (Skyworks Solutions, Inc.)

TPAT083—Computational Study of the Beam-Beam Effect in Tevatron Using the LIFETRAC Code
Alexander Valishev, Yuri Alexahin, Valeri Lebedev (Fermilab), Dmitry Shatilov (BINP SB RAS)

TPAT084—LIFETRAC Code for the Weak-Strong Simulation of the Beam-Beam Effect in Tevatron
Alexander Valishev, Yuri Alexahin, Valeri Lebedev (Fermilab), Dmitry Shatilov (BINP SB RAS)

TPAT085—Development of a Beam-Beam Simulation Code for the e+e- Collider
Yuan Zhang (IHEP Beijing), Kazuhito Ohmi (KEK)

TPAT086—Enhanced Optical Cooling of Particle Beams in Storage Rings
Evgueni Grigorievich Bessonov (LPI)

TPAT087—The Effect of Magnetic Field Errors on Dynamical Friction in Electron Coolers
David L. Bruhwiler, Dan Tyler Abell, Richard Busby (Tech-X), Ilan Ben-Zvi, Alexei V. Fedotov, Animesh Kumar Jain, Vladimir N. Litvinenko (BNL), John R. Cary (CIPS; Tech-X), Alexey Burov (Fermilab)

TPAT088—Consideration of Relativistic Dynamics in High-Energy Electron Coolers
David L. Bruhwiler, George I. Bell (Tech-X)

TPAT089—Cooling Dynamics Studies and Scenarios for the RHIC Cooler
Alexei V. Fedotov, Ilan Ben-Zvi, Vladimir N. Litvinenko (BNL)

TPAT090—Simulations of High-Energy Electron Cooling
Alexei V. Fedotov, Ilan Ben-Zvi, Yury Isaakovich Eidelman, Vladimir N. Litvinenko, Nikolay Malitsky

(BNL), Igor Meshkov, Anatoly Olegovich Sidorin, Alexander Smirnov, Grigory Troubnikov (JINR), David L. Bruhwiler (Tech-X)

TPAT091—IBS for Ion Distribution Under Electron Cooling

Alexei V. Fedotov, Ilan Ben-Zvi, Yury Isaakovich Eidelman, Vladimir N. Litvinenko, George Parzen (BNL)

TPAT092—Numerical Studies of the Friction Force for the RHIC Electron Cooler

Alexei V. Fedotov (BNL), David L. Bruhwiler (Tech-X)

TPAT093—Operations and Performance of RHIC as a Cu-Cu Collider

Fulvia C. Pilat, Leif Ahrens, James Alessi, Mei Bai, Donald Barton, Joanne Beebe-Wang, Michael Blaskiewicz, Joseph Michael Brennan, Donald Bruno, John J. Butler, Peter Cameron, Roger Connolly, Joseph DeLong, Theodore D'Ottavio, Angelika Drees, Wolfram Fischer, George Ganetis, Chris J. Gardner, Joseph Glenn, Thomas Hayes, Hsiao-Chaun Hseuh, Haixin Huang, Peter Ingrassia, Ubaldo Iriso, Vladimir N. Litvinenko, Yun Luo, William W. MacKay, Gregory James Marr, Al Marusic, Robert Michnoff, Christoph Montag, John Morris, Tony Nicoletti, Brian Oerter, Vadim Ptitsyn, Thomas Roser, Thomas Russo, Jon Sandberg, Todd Satogata, Carl Schultheiss, Loralie Smart, Dannie Steski, Steven Tepikian, Rogelio Tomas, Dejan Trbojevic, Nicholaos Tsoupas, Joseph Tuozzolo, Kurt Vetter, Alex Zaltsman, Keith Zeno, S.Y. Zhang, Wu Zhang (BNL)

TPAT094—Optical Signals from the Polarized Proton Jet Target in RHIC Used To Measure the Beam Profile and Impurities in Jet

Dejan Trbojevic, Roger Connolly, Nicholas P. Luciano, Yousef Makdisi, Anatoli Zelenski (BNL)

TPAT095—Beam Induced Pressure Rise at RHIC

S.Y. Zhang, James Alessi, Mei Bai, Michael Blaskiewicz, Peter Cameron, Angelika Drees, Wolfram Fischer, Justin Gullotta, Ping He, Hsiao-Chaun Hseuh, Haixin Huang, Ubaldo Iriso, Roger C. Lee, Vladimir N. Litvinenko, William W. MacKay, Tony Nicoletti, Brian Oerter, Steve Peggs, Fulvia C. Pilat, Vadim Ptitsyn, Thomas Roser, Todd Satogata, Loralie Smart, Louis Snydstrup, Peter Thieberger, Dejan Trbojevic, Lanfa Wang, Jie Wei, Keith Zeno (BNL)

TPAT096—Focusing-Free Transition Crossing in RHIC Using Induction Acceleration

Ken Takayama, Yoshito Shimosaki, Kota Torikai (KEK), Jie Wei (BNL)

TPAT097—CLIC Drive Beam and LHC Based FEL-Nucleus Collider

Omer Yavas (Ankara University), Hans-Heinrich Braun, Roberto Corsini (CERN), Saleh Sultansoy (Gazi University)

TPAT098—A Review of TeV Scale Lepton-Hadron and Photon-Hadron Colliders

Saleh Sultansoy (Gazi University)

TPAT099—Main Parameters of ILC-Tevatron Based Lepton-Hadron and Photon-Hadron Colliders

Saleh Sultansoy (Gazi University), Omer Yavas (Ankara University), Orhan Cakir, Abbas Kenan Ciftci, Erdal Recepoglu (Ankara University)

TPAT100—On the Feasibility of a 20 Tesla Wiggler to Damp Phase Space in LHC

Peter M. McIntyre, Akhdiyor Sattarov (Texas A&M University)

Oral Session TOPA—Advanced Concepts
Ballroom A @ 13:50
Chair: C. Pellegrini (UCLA)

13:50 TOPA001—Mono Energetic Beams from Laser Plasma Interactions

Cameron Guy Robinson Geddes, Eric Esarey, Wim Leemans, Carl Bernhardt Schroeder, Csaba Toth, Jeroen Van Tilborg (LBNL), John R. Cary (CIPS; Tech-X), David L. Bruhwiler, Chet Nieter (Tech-X)

14:15 TOPA002—Review of Beam-Driven Plasma Wakefield Experiments at SLAC

Mark Hogan, Christopher Barnes, Franz-Josef Decker, Paul Emma, Richard Iverson, Patrick Krejcik, Caolionn O'Connell, Robert Siemann, Dieter Walz (SLAC), Chris Clayton, Chengkun Huang, Devon K. Johnson, Chan Joshi, Wei Lu, Kenneth Marsh, Warren Mori (UCLA), Suzhi Deng, Tom Katsouleas, Patric Muggli, Erdem Oz (USC)

14:40 TOPA003—Optical Injection into Laser Wake Field Accelerators

John R. Cary (CIPS; Tech-X), Eric Esarey, Cameron Guy Robinson Geddes, Wim Leemans (LBNL), David L. Bruhwiler, Rodolfo Giaccone, Chet Nieter (Tech-X)

15:05 TOPA004—First Demonstration of a Staged Optical Injection and Laser Wakefield Acceleration

Dmitri Kaganovich (NRL; LET), Daniel Gordon, Richard Hubbard, Theodore Jones, Phillip Sprangle, Antonio Ting (NRL)

15:20 TOPA005 – Left-Handed Metamaterials Studies and Their Application to Accelerator Physics

Sergey P. Antipov, Wanming Liu, John Gorham Power (ANL), Linda Klamp Spentzouris (Illinois Institute of Technology)

Oral Session TOPB—Light Sources and Free-Electron Lasers
Ballroom B @ 13:50
Chair: L. Memminga (JLab)

13:50 TOPB001—Methods of Attosecond X-Ray Pulse Generation

Alexander Zholents (LBNL)

14:15 TOPB002—Sub-Picosecond Pulse Source:

Recent Results

Jerome Hastings (SLAC)

14:40 TOPB003—Progress in Large Scale

Femtosecond Timing Distribution and RF-Synchronization

Franz Xaver Kaertner, Fatih Oemer Ilday, Jung-Won Kim (MIT), Axel Winter (Uni HH)

15:05 TOPB004—Overview of Energy Recovery

Linacs

Ivan Vasilyevich Bazarov (Cornell Univ.)

Oral Session TOPC—Instrumentation

Ballroom C @ 13:50

Chair: R. Webber (FNAL)

13:50 TOPC001—Visualizing Electron Beam Dynamics and Instabilities with Synchrotron Radiation at the Advanced Photon Source

Bingxin Yang, Alex Lumpkin (ANL)

14:15 TOPC002—Residual-Gas-Ionization Beam Profile Monitors in RHIC

Roger Connolly, Robert Michnoff, Steven Tepikian (BNL)

14:40 TOPC003—Beam Measurements and Upgrade at BL 7.2, the Second Diagnostics Beamline of the Advanced Light Source

Fernando Sannibale, Alan Biocca, Nicholas Kelez, Michael C. Martin, Toshiro Nishimura, Tom Scarvie, Eric Williams (LBNL), Gregory James Portmann (LBNL/ALS)

14:55 TOPC004—Tevatron Beam Position Monitor Upgrade

Stephen Wolbers, Michael A. Martens, Jim Steimel, Robert C. Webber (FNAL)

15:10 TOPC005—Transverse Emittance Blow-Up Due to the Operation of Wire Scanners, Analytical Predictions and Measurements

Federico Roncarolo, Bernd Dehning (CERN)

Oral Session TOPA (Cont.)—Advanced Concepts
Ballroom A @ 15:35
Chair: W. Leemans (BNL)

15:35 TOPA006—High Energy Gain IFEL at Neptune/UCLA

Pietro Musumeci, Chris Clayton, Adnan Doyuran, Robert Joel England, Chan Joshi, Claudio Pellegrini, Joseph Ralph, James Rosenzweig, Chieh Sung, Sergei Tochitsky, Gil Travish, Rodney Yoder (UCLA), Sergey Tolmachev, Alexander Varfolomeev (RRRC Kurchatov Institute)

16:00 TOPA007—Proton Acceleration and High-Energy Density Physics from Laser Foil Interactions

Peter Andrew Norreys (CCLRC/RAL), Karl Krushelnick (Imperial College of Science and Technology), Matthew Zepf (Queen's University of Belfast)

16:25 TOPA008—First Observation of Laser-Driven Particle Acceleration in a Semi-Infinite Vacuum Space

Tomas Plettner, Robert L. Byer, Todd Iversen Smith (Stanford University), Eric R. Colby, Benjamin Cowan, Chris M.S. Sears, Robert Siemann, James Spencer (SLAC)

16:50 TOPA009—Photonic Band Gap Accelerator Demonstration at Ku-Band

Evgenya I. Smirnova, Amit S. Kesar, Ivan Mastovsky, Michael A. Shapiro, Richard J. Temkin (MIT/PSFC), Lawrence M. Earley, Randall L. Edwards (LANL)

17:05 TOPA010—Photonic Crystal Laser-Driven Accelerator Structures

Benjamin Cowan (SLAC)

17:20 TOPA011—Self-Consistent Scheme for Obtaining Electron-Positron Collisions with Multi-TeV Energy

Alexander A. Mikhailichenko (Cornell Univ.)

**Oral Session TOPD – Development in the South, East, and
Mid-East/Nuclear Physics High-Energy Physics
Ballroom B @ 15:30, Chair: P. Schmor (TRIUMF)**

15:30 TOPD001—SC Cyclotron and RIB Facilities
in Kolkata
Bikash Sinha, Rakesh Kumar Bhandari (DAE/VECC)

15:55 TOPD002—The Second Phase Construction
of the Beijing Electron-Positron Collider
Chuang Zhang, Guoxi Pei (IHEP Beijing)

16:20 TOPD003—Cooler Storage Ring at China
Institute of Modern Physics
Jia Wen Xia (IMP)

16:45 TOPD004—RIB Facility at VECC Kolkata—A
Status Report
Alok Chakrabarti (DAE/VECC)

**Oral Session TOPE—Linear Colliders
Ballroom C @ 15:30
Chair: M. Tigner (Cornell Univ.)**

15:30 TOPE00—Experience with the TTF-2
Lutz Lilje (DESY)

15:55 TOPE002—Advances in Normal Conducting
Accelerator Technology from the X-Band Linear
Collider Program
Chris Adolphsen (SLAC)

16:20 TOPE003—Results from DR and Instrumen-
tation Test Facilities
Junji Urakawa (KEK)

16:45 TOPE004—CLIC Progress Towards Multi-
TeV Linear Colliders
*Jean-Pierre Delahaye, Hans-Heinrich Braun
(CERN)*

Poster Session TPPE—Sources and Injectors
Ballroom E, 13:50-17:10

TPPE001—The HERA RF-Volume Source

Jens Peters (DESY)

TPPE002—Development of an Ion Source Via Laser Ablation Plasma

Fabio Belloni, Domenico Doria, Antonella Lorusso, Vincenzo Nassisi (INFN-Lecce)

TPPE003—Analysis of Multigrid Extraction Plasma Meniscus Formation

Marco Cavenago (INFN/LNL), Vanni Antoni, Fabio Sattin (CNR/RFX), Arturo Tanga (MPI/IPP)

TPPE004—Charge Exchange Efficiency Measurements for 6Li^+ / 7Li^+ Beams Using a Cs Vapour Cell

Maurizio Re, Francesco Chines, Giacomo Cuttone, Mariano Menna, Esteban Messina (INFN/LNS), Jean-Christophe Bilheux, Dan Stracener (ORNL)

TPPE005—50keV, 50mA Pulsed Proton Injector for PEFP

In-Seok Hong, Yong-Sub Cho, Sang-Hyo Han (KAERI)

TPPE006—Radioactive Beams from ^{252}CF Fission Using a Gas Catcher and an ECR Charge Breeder at ATLAS

Richard Claude Pardo, Samuel I. Baker, Adam Hecht, Eugene Frank Moore, Guy Savard (ANL)

TPPE007—Energy Correction for High Power Proton/H Minus Linac Injectors

Deepak Raparia, Yong Yung Lee, Jie Wei (BNL)

TPPE009—Considerations for High Current Density Ion Injectors for HEDP

Joe W. Kwan (LBNL), Glen Westenskow (LLNL)

TPPE010—A Parallel 3D Model for the Multi-Species Low Energy Beam Transport System of the RIA Prototype ECR Ion Source VENUS

Ji Qiang, Daniela Leitner, Damon Todd (LBNL)

TPPE011—A Compact High-Brightness Heavy-Ion Injector

Glen Westenskow, David Grote, Erni Halaxa (LLNL), Frank Bieniosek, Joe W. Kwan (LBNL)

TPPE012—Using the Orbit Tracking Code Z3CYCLONE To Predict the Beam Produced by a

Cold Cathode PIG Ion Source for Cyclotrons Under DC Extraction

Edward Forringer (NSCL)

TPPE013—Simulations of Solenoid and Electrostatic Quadrupole Focusing of High Intensity Beams from an ECR Ion Source at NSCL

Qiang Zhao, Anatoly Balabin, Felix Marti, Jeffry W. Stetson, Xiaoyu Wu (NSCL)

TPPE014—Extraction of Space-Charge-Dominated Ion Beams from the 6 GHz Flat-Field ECR Ion Source: Simulations and Experiments

Hassina Zaim Bilheux, Gerald Alton, Yoko Kawai, Yuan Liu (ORNL)

TPPE015—The Effusive Flow Properties of Target/Vapor-Transport Systems for Radioactive Ion Beam Applications

Yoko Kawai, Gerald Alton, Yuan Liu (ORNL)

TPPE016—ISOL Targets Prepared with a New Infiltration Paint Coating Method

Yoko Kawai, Gerald Alton, Jean-Christophe Bilheux, Ralph Barton Dinwiddie, J. O. Kiggans, W. D. Porter, Dan Stracener (ORNL)

TPPE017—A New Method for Enhancing the Performance of Conventional B-Field Configuration ECR Ion Sources

Yoko Kawai, Gerald Alton, Hassina Zaim Bilheux, Yuan Liu (ORNL)

TPPE018—Characterization of Hot-Cavity Surface Ionization Sources

Yuan Liu, Hassina Zaim Bilheux, Yoko Kawai (ORNL)

TPPE019—Laser Ion Source Development for ISOL Systems at RIA

Yuan Liu, Cyrus Baktash, James R. Beene, Hassina Zaim Bilheux, Charles Havener, Herbert F. Krause, David Robert Schultz, Dan Stracener, C. Randy Vane (ORNL), Kim Brueck, Christopher Geppert, Thomas Kessler, Klaus Wendt (Johannes Gutenberg University Mainz)

TPPE020—Radioactive Ion Beam Development at the Holifield Radioactive Ion Beam Facility

Dan Stracener, Gerald Alton, James R. Beene, Hassina Zaim Bilheux, Jean-Christophe Bilheux, Jeff C. Blackmon, Darryl Dowling, Raymond Juras, Yoko Kawai, Yuan Liu, Martha Meigs, Paul Mueller, A. Tatum (ORNL), Ken Carter, Andreas Kronenberg, Eugene Henry Spejewski (Center of Excellence for RIB Studies for Stewardship Science)

TPPE021—Simulation Studies of Diffusion-Release and Effusive-Flow of Short-Lived Radioactive Isotopes

Yan Zhang, Gerald Alton (ORNL)

TPPE022—First Results on the Path Towards a Microwave-Assisted H- Ion Source

Roderich Keller (LBNL/AFR), Peter A. Luft, Marco T. Monroy, Alessandro Ratti, Mark J. Regis, Donald L. Syversrud, Joseph G Wallig (LBNL), David E. Anderson, Robert Welton (ORNL/SNS)

TPPE023—Development and Performance of a Proton and Deuteron ECR Ion Source

Kai Dunkel, Florian Kremer, Christian Piel (ACCEL)

TPPE024—Manufacturing and Testing of 2.45 GHz and 4.90 GHz Biperiodic Accelerating Structures for MAMI C

Kai Dunkel, Christian Piel, Hanspeter Vogel, Peter vom Stein (ACCEL), Hans Euteneuer, Andreas Jankowiak (IKP)

TPPE025—Separating the Penning and Analysing Fields in the ISIS H- Ion Source

Dan Faircloth, Reg Sidlow, Mark Whitehead, Trevor Wood (CCLRC/RAL/ISIS)

TPPE026—Commissioning and First Measurement Results at the LEG 100 keV Test Stand

Simon Christian Leemann, Romain Ganter, Volker Schlott, Andreas Streun, Detlef Vermeulen, Albin Wrulich (PSI)

TPPE027—Properties of Laser-Produced Highly Charged Heavy Ions for Direct Injection Scheme

Kazuhiko Sakakibara, Toshiyuki Hattori, Noriyosu Hayashizaki, Taku Ito (RLNR), Hirotugu Kashiwagi (JAERI/ARTC), Masahiro Okamura (RIKEN)

TPPE028—In-Situ Electron Cyclotron Resonance (ECR) Plasma Potential Determination Using an Emissive Probe

Fred Wolfgang Meyer, Yuan Liu (ORNL), Hyun Jong You (Hanyang University)

TPPE029—Measurements of Selective Ion Containment on the RF Charge Breeder Device BRIC

Vincenzo Variale (INFN-Bari), Petr Alekseevich Bak, Gennady Ivanovich Kuznetsov, Boris Skarbo, Michael A. Tiunov (BINP SB RAS), Tarcisio Clauzer, Antonio Rainò (Bari University; INFN-Bari)

TPPE030—A Method to Polarize Stored Antiprotons to a High Degree

Paolo Lenisa (INFN-Ferrara), Frank Rathmann (FZJ)

TPPE031—60 mA Carbon Beam Acceleration with DPIS

Masahiro Okamura (RIKEN), Robert Jameson, Alwin Schempp (IAP), Hirotugu Kashiwagi (JAERI/ARTC), Toshiyuki Hattori, Noriyosu Hayashizaki (RLNR)

TPPE032—Particle-in-Cell Simulations of the VENUS Ion Beam Transport System

Damon Todd, Daniela Leitner, Claude Lyneis, Ji Qiang (LBNL), David Grote (LLNL)

TPPE033—Experimental Comparison of Electrostatic and Magnetic Solenoid Focusing of Low Energy Heavy Ion Beams at the NSCL/MSU

Jeffry W. Stetson, Guillaume Machicoane, Felix Marti, Mathias Steiner, Peter Andras Zavodszky (NSCL), Nikolay Kazarinov (JINR)

TPPE034—Possible Scheme of the Analyzing Part of a Cyclotron Injection Beamline with Higher Energy

Nikolay Kazarinov (JINR), Peter Andras Zavodszky (NSCL)

TPPE035—Efficiency of the Fermilab Electron Cooler's Collector

Lionel Prost, Alexander V. Shemyakin (Fermilab)

TPPE036—Progress of BEPCII Linac Upgrade

Guoxi Pei (IHEP Beijing)

TPPE037—Relative Contributions of Volume and Surface-Plasma Generation of Negative Ions in Gas Discharges

Vadim Dudnikov (BTG)

TPPE038—Thermal Hydraulic Design of PWT Accelerating Structures

David Yu, A. Baxter, Ping Chen, Martin Lundquist, Yan Luo (DULY Research Inc.)

TPPE039—Development of Advanced Models for 3D Photocathode PIC Simulations

Dimitre Dimitrov, David L. Bruhwiler, John R. Cary, Peter Messmer, Peter Stoltz (Tech-X), Donald Feldman, Patrick G. O'Shea (IREAP), Kevin Jensen (NRL)

TPPE040—RF and Magnetic Measurements on the SPARC Photoinjector and Solenoid at UCLA

James Rosenzweig, Alan Cook, Michael P. Dunning, Pedro Frigola, Gil Travish (UCLA), Dennis Thomas Palmer (SLAC)

TPPE041—Multi-Alkali Photocathode Development at Brookhaven National Lab

Andrew Burrill, Ilan Ben-Zvi, David Pate, Triveni Rao, Zvi Segalov (BNL), David Dowell (SLAC)

TPPE042—Study of Secondary Emission Enhanced Photoinjector
Xiangyun Chang (BNL)

TPPE043—Electron Beam Generation and Transport for the RHIC Electron Cooler
Jorg Kewisch, Ilan Ben-Zvi, Xiangyun Chang, Dmitry Kayran, Vladimir N. Litvinenko (BNL)

TPPE044—Upgrade of the Fermilab/NICADD Photoinjector Laboratory
Philippe Regis-Guy Piot, Helen Edwards, Markus Huening (Fermilab), Timothy Koeth (Rutgers University)

TPPE045—Normal-Conducting High Current RF Photoinjector for High Power CW FEL
Sergey Kurennoy, Dale L. Schrage (LANL/LANSCE), Vincent Christina (AES), John Rathke, Tom Schultheiss (AES), Dinh Cong Nguyen, Richard L. Wood (LANL), Lloyd Martin Young (TechSource)

TPPE046—Computer Simulation of the UMER Gridded Gun
Irving Haber, Santiago Bernal, Rami Alfred Kishek, Patrick G. O'Shea, Yun Zou (IREAP), Jean-Luc Vay (LBNL), Alex Friedman, David Grote (LLNL), Martin Reiser (University Maryland)

TPPE047—Fabrication and Measurement of Low Work Function Cesiated Dispenser Photocathodes
Nathan A. Moody, Donald Feldman, Patrick G. O'Shea (IREAP), Kevin Jensen (NRL)

TPPE048—The Injection System of SAGA Light Source
Yoshitaka Iwasaki, Shigeru Koda, Toshihiro Okajima, Hiroyuki Setoyama, Yuichi Takabayashi, Takio Tomimasu, Katuhide Yoshida (Saga Synchrotron Light Source), Hideaki Ohgaki (Kyoto IAE)

TPPE049—Synchronizaiton Between Laser and Electron Beam at Photocathode RF Gun
Akira Sakumi (RIKEN/RARF/BPEL), Yusa Muroya, Mitsuru Uesaka (UTNL)

TPPE050—Beam Injection in Recirculator SALO
Ivan Guk, Anatoly Nikolayevich Dovbnya, Stanislav Kononenko, Fedor Peev, Alexander Tarasenko (NSC/KIPT), Jan Botman, Marnix Van der Wiel (TUE)

TPPE051—The Optimization of the Electrons Injector Resonance System Based on the Evanescent Oscillations
Sergey Perezhogin, Mykola Ivanovich Ayzatskiy, Kateryna Kramarenko, Volodymyr Kushnir, Viktor Mytrochenko, Valentin Zhiglo (NSC/KIPT)

TPPE052—Characteristics of Electron Beam Produced by Magnetron Diode with a Secondary-Emission Cathode

Nikolay Reshetnyak, Anatoly Nikolayevich Dovbnya, Natalya Dovbnya, Viktor Mytrochenko, Valeriy Zakutin (NSC/KIPT)

TPPE053—Design Issues for the ILC Positron Source

Vinod Bharadwaj, Yuri Batygin, Rainer Pitthan, David Schultz, John Sheppard, Heinz Vincke (SLAC), Jeff Gronberg, Werner Stein, Aaron Matthew Tremaine (LLNL)

TPPE054—Status of the Injection System for the Australian Synchrotron Project (Including Combined Function Magnets)

Jesper Kristensen, Henning Bach (Danfysik A/S)

TPPE055—Low Emittance Beam Generated by DC-SC Photo-Injector of Peking University

Rong Xiang (FZR; PKU/IHIP), Xiangyang Lu, Shengwen Quan, Baocheng Zhang, Kui Zhao (PKU/IHIP)

TPPE056—Status of Upgrade RF Gun System at SPring-8

Akihiko Mizuno (JASRI/SPring-8)

TPPE057—An Experimental Study of the Quantum Efficiency and Topology of Single Crystal Copper Cu100 Photocathode Due to Plasma Cleaning and Etching

Robert Kirby, Dennis Thomas Palmer (SLAC)

TPPE058—Dual Feed RF Gun Design for the LCLS

Liling Xiao, Richard Boyce, David Dowell, Zenghai Li, Cecile Limborg-Deprey, John Schmerge (SLAC)

TPPE059—New Electron Gun System for BEPCII

Bo Liu, Yun Long Chi, Mengping Gu, Chuang Zhang (IHEP Beijing)

TPPE060—Simulation Study of a Thermionic RF Gun for High Brightness and Short Pulse Beam

Takumi Tanaka, Hiroyuki Hama, Fujio Hinode, Masayuki Kawai, Atsushi Miyamoto, Katsuhiro Shinto (LNS)

TPPE061—RF Design and Operating Performance of the BNL/AES 1.3 GHz Single Cell Superconducting RF Photocathode Electron Gun

Michael Cole (AES), Ilan Ben-Zvi, Andrew Burrill, Harald Hahn, Triveni Rao, Yongxiang Zhao (BNL), Peter Kneisel (Jefferson Lab)

TPPE062—Photoemission from Low Work Function Coated Metal Surfaces: A Comparison of Theory to Experiment

Kevin Jensen (NRL), Donald Feldman, Nathan A. Moody, Patrick G. O'Shea (IREAP)

TPPE063—Improved Electron Yield and Spin-Polarization from III-V Photocathodes Via Bias Enhanced Carrier Drift

Gregory A. Mulholland, John Bierman (Saxet), Axel Brachmann, James E. Clendenin, Edward Garwin, Robert Kirby, Dah-An Luh, Takashi Maruyama (SLAC), Richard Prepost (UW-Madison/PD)

TPPE064—Study of Electron Bunch Distribution in RF Guns

Vladimir Gorgadze (UCB), Jonathan Wurtele, Alexander Zholents (LBNL)

TPPE065—Calculating of Coupling Factor of Microwave Electron Gun

Xiaohao Bian, Huaibi Chen, Shuxin Zheng (TUB), Derun Li (LBNL)

TPPE066—Geometry Optimization of DC/RF Gun

Ping Chen, Alexei Smirnov, David Yu (DULY Research Inc.)

Poster Session TPPP—Lepton Accelerators and Colliders
Park Concourse, 13:50-17:10

TPPP001—Design of Damping Ring for SuperKEKB

Mitsuo Kikuchi (KEK)

TPPP002—Global-Beta Measurement and Correction at the KEKB Rings

Akio Morita, Haruyo Koiso, Yukiyoshi Ohnishi, Katsunobu Oide (KEK)

TPPP003—Lattice Upgrade Plan for Crab Crossing at the KEKB Rings

Akio Morita, Kazumi Egawa, Haruyo Koiso, Mika Masuzawa, Katsunobu Oide, Ryuhei Sugahara, Masato Yoshida (KEK)

TPPP004—Study of the Beam-Beam Effect for Crab Crossing

Kazuhiro Ohmi, Yoshihiro Funakoshi, Masafumi Tawada (KEK)

TPPP005—Optics and Orbit Measurements Using Turn-By-Turn BPMs

Yukiyoshi Ohnishi, Shigenori Hiramatsu, Hitoshi Ishii, Kenji Mori, Masaki Tejima (KEK)

TPPP006—Beam-Beam Simulation Study with Parasitic Crossing Effect at KEKB
Masafumi Tawada, Yoshihiro Funakoshi, Kazuhito Ohmi (KEK)

TPPP007—Recent Progress at KEKB
Yoshihiro Funakoshi, Kazunori Akai, Kiyokazu Ebihara, Kazumi Egawa, Atsushi Enomoto, John Walter Flanagan, Hitoshi Fukuma, Kazuro Furukawa, Takaaki Furuya, Junji Haba, Shigenori Hiramatsu, Takao Ieiri, Naoko Iida, Hitomi Ikeda, Tatsuya Kageyama, Susumu Kamada, Takuya Kamitani, Shigeaki Kato, Mitsuo Kikuchi, Eiji Kikutani, Haruyo Koiso, Mika Masuzawa, Toshihiro Mimashi, Akio Morita, Tatsuro Nakamura, Hisayoshi Nakayama, Yujiro Ogawa, Kazuhito Ohmi, Yukiyoshi Ohnishi, Norihito Ohuchi, Katsunobu Oide, Miho Shimada, Samo Stanic, Masaaki Suetake, Yusuke Suetsugu, Takashi Sugimura, Tsuyoshi Suwada, Masafumi Tawada, Masaki Tejima, Makoto Tobiyama, Sadaharu Uehara, Shoji Uno, Su Su Win, Noboru Yamamoto, Yasuchika Yamamoto, Yoshiharu Yano, Kazue Yokoyama, Masato Yoshida, Mitsuhiro Yoshida, Shin-ichi Yoshimoto (KEK), Frank Zimmermann (CERN)

TPPP008—Beam-Beam Effects Observed at KEKB
Yoshihiro Funakoshi, Mika Masuzawa, Kazuhito Ohmi, Masafumi Tawada (KEK)

TPPP009—Precise Energy Measurements in Experiments on VEPP-4M Collider
Anton Bogomyagkov, Vladimir Blinov, Vladimir Petrovich Cherepanov, Vladimir Kiselev, Evgeny Levichev, Svyatoslav Mishnev, Nickolai Muchnoi, Sergei Nikitin, Ivan Nikolaev, Dmitry Nikolenko, Andrey Shamov, Evgeny Shubin, Alexander Skrinsky, Dmitry Toporkov, German Tumaikin (BINP SB RAS)

TPPP010—Photon-Nucleon Collider Based on LHC and CLIC
Husnu Aksakal, Abbas Kenan Ciftci (Ankara University, Tandoğan/Ankara), Daniel Schulte, Frank Zimmermann (CERN)

TPPP011—Investigations of Injection Orbits at CESR Based on Turn-By-Turn BPM Measurements
Michael Billing, James Arthur Crittenden, John Dobbins, Mark Alan Palmer, Charles Ralph Strohman (Cornell University)

TPPP012—A Study of the Effects of Beam-Beam Interactions on CESR Optics
Michael Billing, James Arthur Crittenden, David Rubin (Cornell University)

TPPP013—Simulations of Parametric Resonance Ionization Cooling of Muon Beams

Kevin Beard, S. Alex Bogacz, Yaroslav Derbenev (Jefferson Lab), Katsuya Yonehara (Illinois Institute of Technology), Rolland Johnson, Kevin Paul, Thomas Roberts (Muons, Inc)

TPPP014—Ionization Cooling Using a Parametric Resonance

Yaroslav Derbenev (Jefferson Lab), Rolland Johnson (Muons, Inc)

TPPP015—ELIC at CEBAF

Yaroslav Derbenev, Andrei Afanasev, S. Alex Bogacz, Joseph Michael Grames, Andrew Hutton, Geoffrey Arthur Krafft, Rui Li, Lia Mermanga, Matt Poelker, Byung Chel Yunn, Yuhong Zhang (Jefferson Lab)

TPPP016—Beam Physics for the 12 GeV CEBAF Upgrade Project

Lia Mermanga, Jay Benesch, S. Alex Bogacz, Yu-Chiu Chao, Joseph Michael Grames, Leigh Harwood, Geoffrey Arthur Krafft, Michael Tiefenback, Byung Chel Yunn, Yuhong Zhang (Jefferson Lab)

TPPP017—Study of Beam-Beam Effects in eRHIC with Self-Consistent Beam-Beam Simulation

Jack Shi, Lihui Jin (KU), Dong Wang, Fuhua Wang (MIT)

TPPP018—Progress on the Cryogenic System for a Liquid Absorber in the MICE Cooling Channel

Michael Green (BNL), Elwyn Baynham, Thomas William Bradshaw, Yury Ivanyushenkov (CCLRC/RAL), Mary Anne Clare Cummings (Fermilab), Shigeru Ishimoto (KEK), Wing Lau, Stephanie Yang (OXFORDphysics)

TPPP019—Beam Lifetime in the Lepton Ring of eRHIC

Dong Wang (MIT)

TPPP020—Design of a Multi-Cell S-Band Superconducting RF Cavity

Dong Wang (MIT)

TPPP021—A Multi-Cell Deflecting Superconducting RF Cavity for X-Ray FEL

Dong Wang (MIT)

TPPP022—The eRHIC Ring-Ring Collider Design

Fuhua Wang, Manouchehr Farkhondeh, Wilbur Franklin, William Graves, Richard Milner, Chris Tschalaer, Jan Van der Laan, Dong Wang, Abbasali Zolfaghari, Townsend Zwart (MIT), Joanne Beebe-Wang, Vladimir N. Litvinenko, William W. MacKay, Christoph Montag, Satoshi Ozaki, Brett Parker, Steve Peggs, Vadim Ptitsyn, Thomas Roser, Steven

Tepikian, Dejan Trbojevic (BNL), Desmond P. Barber (DESY), Jack Shi (KU), Abhay Deshpande (Stony)

TPPP023—Predicting PEP-II Accelerator-Induced Backgrounds Using TURTLE

Roger John Barlow, William Dunwoodie, Theodore (Ted) Fieguth, Jaroslav Va'vra (SLAC), Witold Kozanecki (CEA/DSM/DAPNIA), Patrick Roudeau, Achille Stocchi (LAL), Stephanie Majewski (Stanford University)

TPPP024—Experimental Study of Crossing-Angle and Parasitic-Crossing Effects at the PEP-II e+e- Collider

Witold Kozanecki (CEA/DSM/DAPNIA), Ilya V. Narsky (CALTECH), Yunhai Cai, John Seeman, Michael K. Sullivan (SLAC)

TPPP025—Modeling Lost-Particle Accelerator Backgrounds in PEP-II Using LPTURTLE

Theodore (Ted) Fieguth, Roger John Barlow (SLAC), Witold Kozanecki (CEA/DSM/DAPNIA)

TPPP026—Bunch-Length Measurements in PEP-II

Alan Stephen Fisher, Robert Holtzapple, Alexander Novokhatski, James Leslie Turner, Ulrich Wienands, Gerald Steven Yocky (SLAC)

TPPP027—Single Bunch Tune and Beam Size

*Measurements Along Mini-Trains in PEP-II
Robert Holtzapple, Denis Dujmic, Alan Stephen Fisher (SLAC)*

TPPP028—Simulation of HOM Leakage in the PEP-II Bellows

Cho-Kuen Ng, Nathan T. Folwell, Jay Langton, Lie-Quan Lee, Alexander Novokhatski (SLAC)

TPPP029—A Preliminary Interaction Region Design for a Super B-Factory

Michael K. Sullivan, Martin Donald, Stanley Ecklund, Alexander Novokhatski, John Seeman, Ulrich Wienands (SLAC), Maria Biagini (INFN/LNF)

TPPP030—Damping Higher Order Modes in the PEP-II B-Factory Vertex Bellows

Stephen Weathersby, Jay Langton, Alexander Novokhatski, John Seeman (SLAC)

TPPP031—A Proposal for a New HOM Absorber in a Straight Section of the PEP-II Low Energy Ring

Stephen Weathersby, Michael Kosovsky, Nadine Kurita, Alexander Novokhatski, John Seeman (SLAC)

TPPP032—Proposal for a Multi-Use Test Beam Area in the SLAC B-Line

Paul Emma, Lynn Bentson, Roger Erickson,

*Theodore (Ted) Fieguth, John Seeman, Andrei Seryi
(SLAC)*

TPPP033—Cavity Alignment Using Beam Induced Higher Order Modes Signals in the TTF Linac
Marc Ross, Josef Frisch, Kirsten Elaine Hacker, Roger Michael Jones, Douglas McCormick, Caolionn O'Connell, Tonee Smith (SLAC), Olivier Napoléon (CEA/DSM/DAPNIA), Nicoleta Baboi, Manfred Wendt (DESY), Rita Paparella (INFN-Milano)

TPPP034—Parameters of a Super-B-Factory Design
John Seeman, Michael K. Sullivan, Ulrich Wienands (SLAC)

TPPP035—Performance of the PEP-II e+e- Collider at SLAC
John Seeman, Stanley Ecklund, Michael K. Sullivan, Ulrich Wienands (SLAC)

TPPP036—A Study of PEP-II Lattice Fixes
Gerald Steven Yocky (SLAC)

TPPP037—Beam-Based Alignment in PEP-II LER
Gerald Steven Yocky, Janice Nelson, Tonee Smith, James Leslie Turner, Mark Woodley (SLAC)

TPPP038—Optimizing the Injection System for PEP-II
Franz-Josef Decker, Ron Akre, Axel Brachmann, Roger Erickson, Artem Kulikov, Michael Staneck, James Leslie Turner (SLAC)

TPPP039—Simulating Six Dimensional Cooling of a Muon Beam in a Ring Cooler
Amit Klier, Gail G Hanson (UCR)

TPPP040—Front-End Design Studies for a Muon Collider
Richard Fernow, Juan Carlos Gallardo (BNL)

TPPP041—Recent Developments on the Muon-Facility Design Code ICOOL
Richard Fernow (BNL)

TPPP042—Synchrotron Radiation in eRHIC Interaction Region
Joanne Beebe-Wang, Christoph Montag (BNL), Daniel James Rondeau (Binghamton University), Bernd Surrow (MIT), Abhay Deshpande (Stony Brook University)

TPPP043—ERL Based Electron-Ion Collider eRHIC
Vladimir N. Litvinenko, Leif Ahrens, Mei Bai, Joanne Beebe-Wang, Ilan Ben-Zvi, Michael Blaskiewicz, Joseph Michael Brennan, Rama Calaga, Xiangyun Chang, Alexei V. Fedotov, Wolfram Fischer, Dmitry

*Kayran, Jorg Kewisch, William W. MacKay,
Christoph Montag, Brett Parker, Steve Peggs, Vadim
Ptitsyn, Thomas Roser, Alessandro Ruggiero, Todd
Satogata, Bernd Surrow, Steven Tepikian, Dejan
Trbojevic, Vitaly Yakimenko, S.Y. Zhang (BNL),
Manouchehr Farkhondeh (MIT), Abhay Deshpande
(Stony Brook University)*

TPPP044—Interaction Region Design for the
Electron-Light Ion Collider ELIC
*Christoph Montag (BNL), S. Alex Bogacz, Yaroslav
Derbenev, Lia Merminga (Jefferson Lab)*

TPPP045—Interaction Region Design for the
Electron-Ion Collider eRHIC
*Christoph Montag, Brett Parker, Steven Tepikian
(BNL), Dong Wang (MIT)*

TPPP046—Improvement of the Muon Collider Momentum Acceptance
Dejan Trbojevic (BNL), Carol Johnstone (Fermilab)

TPPP047—New and Efficient Neutrino Factory Front-End Design
*Juan Carlos Gallardo, J. Scott Berg, Richard
Fernow, Harold G Kirk, Robert Palmer (BNL),
David Neuffer (Fermilab), Kevin Paul (Muons, Inc)*

TPPP048—A Compact Ring for the 6D Cooling of a Muon Beam
*Harold G Kirk, Stephen Alan Kahn (BNL), Frederick
E. Mills (Fermilab), Don Summers (Mississippi
University), David Cline, Yasuo Fukui, Albert A.
Garren (UCLA), Romulus Godang (UMiss)*

TPPP049—eRHIC Detector Design Studies—
Implications and Constraints on the ep(A) Interaction-Region Design
Bernd Surrow (BNL)

TPPP050—Novel Muon Cooling Channels Using Hydrogen Refrigeration and High Temperature Superconductor
*Emanuela Barzi, Daniele Turrioni (Fermilab),
Rolland Johnson, Moyses Kuchnir (Muons, Inc)*

TPPP051—A Muon Cooling Ring with Curved Lithium Lenses
*Yasuo Fukui, David Cline, Albert A. Garren (UCLA),
Harold G Kirk (BNL)*

TPPP052—Simulations of a Gas-Filled Helical Muon Beam Cooling Channel
*Katsuya Yonehara, Daniel Kaplan (Illinois Institute
of Technology), Kevin Beard, S. Alex Bogacz,
Yaroslav Derbenev (Jefferson Lab), Rolland Johnson,
Kevin Paul, Thomas Roberts (Muons, Inc)*

TPPP053—Beryllium RF Windows for Gaseous Cavities for Muon Acceleration

Mohammad Alsharo'a (Muons, Inc) Ivan Gonin, Alfred Moretti, Gennady Romanov (Fermilab)

TPPP054—Studies of RF Breakdown of Metals in Dense Gases

Pierrick M. Hanlet, Mohammad Alsharo'a, Rolland Johnson, Moyses Kuchnir (Muons, Inc), Charles Ankenbrandt, Alfred Moretti, Milorad Popovic (Fermilab), Daniel Kaplan, Katsuya Yonehara (Illinois Institute of Technology)

TPPP055—Simultaneous Bunching and Precooling Muon Beams with Gas-Filled RF Cavities

Kevin Paul (Muons, Inc), David Neuffer (Fermilab), Yaroslav Derbenev (Jefferson Lab)

TPPP056—A Muon Cooling Demonstration Experiment Using Gaseous Hydrogen

Thomas Roberts, Mohammad Alsharo'a, Pierrick M. Hanlet, Rolland Johnson, Moyses Kuchnir; Kevin Paul (Muons, Inc), Charles Ankenbrandt, Alfred Moretti, Milorad Popovic, Victor Yarba (Fermilab), Daniel Kaplan, Katsuya Yonehara (Illinois Institute of Technology)

Poster Session TPPT—Radio-Frequency Systems
Meeting Room 200 A-C, 13:50-17:10

TPPT001—Computer Simulations of High Beta TRIUMF Quarter Wave Resonators

Vladimir Zviagintsev, Robert Edward Laxdal (TRIUMF)

TPPT002—Beam Tests of the EU-Cavity at DELTA

Frank Marhauser, Ernst Weihreter (BESSY GmbH), Robert Gerd Heine, Thomas Weis (DELTA)

TPPT003—Development of Normal Conducting CH- DTL

Gianluigi Clemente, Holger Podlech, Ulrich Ratzinger, Rudolf Tiede (IAP)

TPPT004—A 175 MHz RFQ Design for IFMIF Project

Sunao Maebara, Masayoshi Sugimoto (JAERI), Mikio Saigusa, Yuichi Saitou (Ibaraki University), Shinichi Moriyama (JAERI/NAKA)

TPPT005—Dual Harmonic Operation with Broadband MA Cavities in J-PARC RCS

Masanobu Yamamoto (JAERI), Masahiro Nomura,

Alexander Schnase, Fumihiko Tamura (JAERI/J-PARC), Shozo Anami, Eizi Ezura, Keigo Hara, Yoshinori Hashimoto, Chihiro Ohmori, Akira Takagi, Masahito Yoshii (KEK)

TPPT006—Development of RF Input Coupler with a Coaxial Line TiN-Coated Against Multipacting
Tetsuo Abe, Tatsuya Kageyama, Hiroshi Sakai, Yasunao Takeuchi (KEK)

TPPT007—Application of Highly Pure Copper Lining to RF Cavities for an Electron-Positron Super B Factory

Tetsuo Abe, Tatsuya Kageyama (KEK), Tomaru Nakamura, Katsuya Tsujimoto (Asahi Kinzoku Co., Ltd.), Keisuke Tajiri (Churyo Engineering Co., Ltd.), Zenzaburo Kabeya, Toshihiro Kawasumi (MHI)

TPPT008—New Design of Crab Cavity for SuperKEKB

Kazunori Akai, Yoshiyuki Morita (KEK)

TPPT009—High Gradient Study at KEK on X-Band Accelerator Structure for Linear Collider

Toshiyasu Higo, Atsushi Enomoto, Shigeki Fukuda, Hitoshi Hayano, Takayuki Saeki, Nobuhiro Terunuma, Ken Watanabe (KEK), Taikan Suehara (University of Tokyo)

TPPT010—HOM Damping of ARES Cavity System for SuperKEKB

Tatsuya Kageyama (KEK)

TPPT011—R and D Status of C-Band Accelerating Section for SuperKEKB

Takuya Kamitani, Mitsuo Ikeda, Kazuhisa Kakihara, Satoshi Ohsawa, Takashi Sugimura, Kazue Yokoyama (KEK)

TPPT012—High Power Testing of Input Couplers for SuperKEKB

Hiroshi Sakai (KEK)

TPPT013—The Affect of HOM Couplers on the Accelerating Mode in the Damped Cavity at the Photon Factory Storage Ring

Takeshi Takahashi, Masaaki Izawa, Shogo Sakanaka, Kensei Umemori (KEK), Tadashi Koseki (RIKEN/RARF/CC)

TPPT014—Induction Acceleration Cavity

Kota Torikai, Yoshio Arakida, Tadaaki Kono, Eiji Nakamura, Yoshito Shimosaki, Ken Takayama, Takeshi Toyama, Masayoshi Wake (KEK), Junichi Kishiro (JAERI/LINAC)

TPPT015—Coupler Matching Techniques for C-Band Accelerating Section

*Kazue Yokoyama, Takuya Kamitani, Satoshi Ohsawa,
Takashi Sugimura (KEK)*

TPPT016—Development of Co-Based Amorphous Core for Untuned Broadband RF Cavity
Toshiyuki Misu (NIRS)

TPPT017—Fabrication and Test of the Drift Tubes for PEFP 20 MeV DTL
Yong-Hwan Kim, Yong-Sub Cho, Hyeok-Jung Kwon (KAERI)

TPPT018—Tuning of PEFP 20 MeV DTL
Mi-Young Park, Yong-Sub Cho, Hyeok-Jung Kwon, Kyung Tae Seol, Young-Gi Song (KAERI)

TPPT019—Numerical Study of Coupling Slot Effects on Beam Dynamics in ILU-12 Industrial Accelerator

Vladimir V. Tarnetsky, Vadim Auslender, Ivan Makarov, Michael A. Tiunov (BINP SB RAS)

TPPT020—30 GHz Power Production in CTF3
Walter Wuensch, Claude Achard, Hans-Heinrich Braun, Georges Carron, Roberto Corsini, Alexej Grudiev, Samuli Tapani Heikkinen, Daniel Schulte, Jonathan Sladen, Igor Syratchev, Frank Tecker, Ian Wilson (CERN)

TPPT021—Tuning and Characterization of the SSRL Microwave Gun Cavity
Wai-Keung Lau (NSRRC), Cheng Wei Chen, Huan Yang Chen (NTHU)

TPPT022—The Structure of the High Frequency Focusing Cells in Linear Ion Accelerators
Vasilij Bomko, Alexander Dyachenko, Anatolij Kobets, Elena Dmitrievna Marynina, Zinaida Ptukhina, Sergej Tishkin, Borys Zajtsev (NSC/KIPT)

TPPT023—Numerical Calculation of Fields in the Structures
Vasilij Bomko, Zinaida Ptukhina, Sergej Tishkin (NSC/KIPT)

TPPT024—Optimization of Symmetrical RF Couplers for S-Band Accelerating Structures
Alireza Nassiri, Geoff J. Waldschmidt (ANL)

TPPT025—Breakdown in RF Cavities
Jim Norem, Ahmed Hassanein, Zeke Insepov, Isak Konkashbaev (ANL)

TPPT026—Energy Upgrade of the DUVFEL Linac
James Rose (BNL), Joseph Greco, Thomas Seda, Pooran Singh, John Skaritka, Xijie Wang (BNL/NSLS)

TPPT027—53 MHz Beam Loading Compensation for Slip Stacking in the Fermilab Main Injector
Joseph Dey, Ioannis Kourbanis (Fermilab)

TPPT028—Design of a New Main Injector Cavity for the Fermilab Proton Driver Era
Vincent Wu, Zubao Qian, David Wildman (Fermilab)

TPPT029—Fabrication of the Prototype 201.25 MHz Cavity for a Muon Ionization Cooling Experiment
Robert Rimmer, Stephen Manning, Robert Manus, Larry Phillips, Mircea Stirbet, Genfa Wu (Jefferson Lab), Derun Li, Robert MacGill, John William Staples, Steve Virostek, Michael Zisman (LBNL), Robert Hafley, Richard Martin, Karen Taminger (NASA Langley), Michael Reep, Don Summers (UMiss)

TPPT030—RF, Thermal and Structural Analysis of the 201.25 MHz Muon Ionization Cooling Cavity
Steve Virostek, Derun Li (LBNL)

TPPT031—Coupler Design for the LCLS Injector S-Band Structures
Zenghai Li, Lynn Bentson, David Dowell, Cecile Limborg-Deprey, John Schmerge, Liling Xiao (SLAC)

TPPT032—Modifications on RF Components in the LCLS Injector
Cecile Limborg-Deprey, David Dowell, Zenghai Li, John Schmerge, Liling Xiao (SLAC)

TPPT033—Three-Dimensional Simulations Using the VORPAL Code of Power Absorbtion and Other Electron Effects in X-Band Waveguides
Peter Stoltz, Peter Messmer, Chet Nieter (Tech-X), John R. Cary (CIPS; Tech-X)

TPPT034—Performance of the RFI Linac Prototype
Donald A. Swenson (Linac Systems), W. Joel Starling (Linac Systems)

TPPT035—High-Power RF Testing of a 352-MHz Fast-Ferrite RF Cavity Tuner at the Advanced Photon Source
Douglas Horan, Ernest E. Cherbak (ANL)

TPPT036—Higher-Order-Mode Damper Testing and Installation in the Advanced Photon Source 352-MHz Single-Cell RF Cavities
Geoff J. Waldschmidt, Douglas Horan, Leonard H. Morrison, Geoffery Pile (ANL)

TPPT037—A Coaxial Subharmonic Cavity Design for Direct Injection at the Advanced Photon Source
Geoff J. Waldschmidt, Alireza Nassiri (ANL)

TPPT038—Development of C-Band Accelerator Structure with Smooth Shape Couplers
Takashi Sugimura, Mitsuo Ikeda, Kazuhisa Kakihara, Takuya Kamitani, Satoshi Ohsawa, Kazue Yokoyama (KEK)

TPPT039—Installation and Testing for Commissioning of Normal Conducting RF Linac Segment in the SNS

Yoon W. Kang, Alexander V. Aleksandrov, David E. Anderson, Marianne M. Champion, Mark Champion, Mark Crofford, Craig Deibebe, George W. Dodson, Ray E. Fuja, Paul Gibson, Gary Johnson, Peter Ladd, Hengjie Ma, Michael P. McCarthy, Maurice Piller, Johnny Y. Tang, Alexandre Vasilievich Vassiotchenko, Derrick Williams (ORNL/SNS), Daniel Rees, James Stovall, Lloyd Martin Young (LANL), James Billen, William Roybal, Karen Ann Young (LANL/LANSCE), Pamela Gurd, Thomas Hardek (ORNL/ASD)

TPPT040—X-Band Dipole Mode Deflecting Cavity for the UCLA Neptune Beamline

Robert Joel England, Brendan O'Shea, James Rosenzweig, Gil Travish (UCLA, Los Angeles, California), David Alesini (INFN/LNF, Frascati)

TPPT041—RF Tuning and Fabrication Status of the First Module for J-PARC ACS

Hiroyuki Ao, Takatoshi Moirshita, Akira Ueno (JAERI/LINAC), Kazuo Hasegawa (JAERI), Yoshishige Yamazaki (JAERI/J-PARC), Masanori Ikegami (KEK), Valentin Paramonov (RAS/INR)

TPPT042—The Simulation Calculations and Dielectric Characteristics Investigation of a Hybrid Dielectric-Iris-Loaded Travelling Accelerating Structure

Cong-Feng Wu, Sai Dong, Lin Wang (USTC/NSRL)

TPPT043—The Studies of Hybrid Dielectric-Iris-Loaded Accelerating Structure

Cong-Feng Wu, Hui Lin, Dong Sai (USTC/NSRL)

TPPT044—Beam Position Resolution and Centering Accuracy Achieved Using HOM Signals from Damped and Detuned X-Band Accelerator Structures

Steffen Doeberl, Chris Adolphsen, Roger Michael Jones, James R. Lewandowski, Mauro Torino Francesco Pivi, Juwen W. Wang (SLAC)

TPPT045—Accelerator Structure Transverse Dipole Mode Measurement with a Stretched Wire Technique

James R. Lewandowski, Gordon B. Bowden, Roger Michael Jones, Juwen W. Wang (SLAC), Nicoleta Baboi (DESY)

TPPT046—Wakefield Measurements of a Pair of Dipole Frequency Interleaved, High Gradient, X-Band Accelerator Structures

Chris Adolphsen, Gordon B. Bowden, Steffen Doebert, Valery Dolgashev, Roger Michael Jones, James R. Lewandowski, Zenghai Li, Roger Heering Miller, Mauro Torino Francesco Pivi, Juwen W. Wang (SLAC), Yasuo Higashi, Toshiyasu Higo (KEK)

TPPT047—Function Investigation of the Dipole Stabilizer Rods in an RFQ

Shinian Fu, Huafu Ouyang, Taoguang Xu (IHEP Beijing)

TPPT049—Design and Cold Model Test of 500MHz Damped Cavity for ASP Storage Ring RF System

Junko Watanabe, Koichi Nakayama, Kiyokazu Sato, Hidenori Suzuki (TOSHIBA), Alan Jackson, Gregory Scott LeBlanc (ASP), Norio Nakamura, Hiroshi Sakai, Hiroyuki Takaki (ISSP/SRL), Masaaki Izawa (KEK), Tadashi Koseki (RIKEN/RARF/CC)

TPPT050—Multi-Beam Rod-Loaded Klystron Cavities

Alexei Smirnov, David Yu (DULY Research Inc.)

TPPT051—RF Input Power Double Window Coupler for TESLA

Quan-Sheng Shu, Guangfeng Cheng, Joseph T. Susta (AMAC)

TPPT052—Cryogenic, Magnetic and RF Performance of the ISAC-II Medium Beta Cryomodule at TRIUMF

Robert Edward Laxdal, Ken Fong, Amiya Kumar Mitra, Thomas Ries, Igor Sekachev, Guy Stanford, Vladimir Zviagintsev (TRIUMF)

TPPT053—Low-Beta SC Quarter-Wave Resonator and Cryomodule for SPIRAL 2

Stéphane Chel, Pierre-Emmanuel Bernaudin, Pierre Bosland, Guillaume Devanz, Philippe Hardy, Frédéric Michel (CEA/DSM/DAPNIA)

TPPT054—CW Operation of the TTF-III Input Coupler

Jens Knobloch, Wolfgang Anders (BESSY GmbH), Stefan Bauer, Michael Pekeler (ACCEL), Sergey Belomestnykh (Cornell University), Denis Kostin, Wolf-Dietrich Möller (DESY), Andree Buechner, Hartmut Buettig, Frank Gabriel (FZR)

TPPT055—Surface Preparation by Electro-Polishing of High Gradient Cavities at DESY

Axel Matheisen, Lutz Lilje, Herbert Morales Zimmermann, Bernd Petersen, Manuela Schmoekel, Nicolai Steinhau-Kuehl (DESY)

TPPT056—Design of a Low Loss SRF Cavity for the ILC

Jacek Sekutowicz (DESY), Ivan Gonin, Timergali N. Khabibouline, Nikolay Solyak (Fermilab), Peter Kneisel (Jefferson Lab), Yuichi Morozumi, Kenji Saito (KEK), Kwok Ko, Lie-Quan Lee, Zenghai Li, Cho-Kuen Ng, Liling Xiao (SLAC)

TPPT057—Quality Control of the Electro Polishing Process at DESY

Nicolai Steinhau-Kuehl, Axel Matheisen, Bernd Petersen, Manuela Schmoekel (DESY)

TPPT058—Test of the Superconducting CH-Structure

Holger Podlech, Horst Deitinghoff, Horst Klein, Holger Liebermann, Ulrich Ratzinger, Andreas Christoph Sauer (IAP)

TPPT059—Improvement of the Blade Tuner Design for Superconducting RF Cavities

Carlo Pagani, Angelo Bosotti, Nicola Panzeri, Rocco Paparella, Paolo Pierini (INFN/LASA)

TPPT060—Design of a Multi-Cell, HOM Damped Superconducting Cavity for the Strong RF Focusing Experiment at DAFNE

Alessandro Gallo, David Alesini, Roberto Boni, Fabio Marcellini (INFN/LNF), Carlo Pagani (INFN/LASA; DESY)

TPPT061—Prototyping of a 352 MHz, beta=0.17 Superconducting Coaxial Half Wave Resonator
Alberto Facco, Fabio Scarpa, Davide Zenere (INFN/LNL), Vladimir Zviagintsev (TRIUMF)

TPPT062—High Power Tests of the Prototype Cryomodule for ADS Superconducting Linac
Eiji Kako, Shuichi Noguchi, Norihito Ohuchi, Toshio Shishido, Kiyosumi Tsuchiya (KEK), Etsuji Chishiro (JAERI), Nobuo Ouchi (JAERI/LINAC)

TPPT063—Higher-Order-Mode Damping of L-Band Superconducting Cavity Using a Radial Transmission Line

Kensei Umemori, Masaaki Izawa, Kenji Saito, Shogo Sakanaka (KEK)

TPPT064—Design of a Prototype Superconducting Third Harmonic RF System at PLS

Eun-San Kim, Myung-Hwan Chun, Hyung-Gyun Kim, Kyungryul Kim, In-Soo Park, Young-Uk Sohn (PAL)

TPPT065—Cryogenic-Related Performance of a SRF Cavity Module in NSRRC

Ming-Chyuan Lin, Lung-Hai Chang, Shu-Shen Chang, Fu-Tsai Chung, Jen-Chieh Lin, Gwo-Huei

*Luo, Chaoen Wang, Tz-Te Yang, Meng-Shu Yeh
(NSRRC)*

TPPT066—Operational Experience of the Superconducting Radio Frequency Cavity at NSRRC
Chaoen Wang, Lung-Hai Chang, Shu-Shen Chang, Chien-Te Chen, Fu-Tsai Chung, Feng-Zone Hsiao, Gao-Yu Hsiung, Kuo-Tung Hsu, Chin-Cheng Kuo, Ming-Chyuan Lin, Ren-Jie Lin, Yao-Kwang Lin, Gwo-Huei Luo, Ming-Hsum Tsai, Jia-Ying Yang, Tz-Te Yang, Meng-Shu Yeh (NSRRC)

TPPT067—High Power Coupler Test Results for the ERLP

*James Henry Paul Rogers, Carl David Beard
(CCLRC/DL/ASTeC)*

TPPT068—Optimized Shape of Cavity Cells for Apertures Smaller than in TESLA
Valery D. Shemelin (Cornell University)

TPPT069—Design Considerations for the Mechanical Tuner of the RHIC Electron Cooler RF Cavity
Jim Rank, Ilan Ben-Zvi, Harald Hahn, Gary McIntyre (BNL), Edward Daly, Warren Funk, Joseph P. Preble (Jefferson Lab)

TPPT070—Development of the Superconducting 3.9 GHz Accelerating Cavity at Fermilab
Nikolay Solyak, Tug Tacku Arkan, Pierre Bauer, Leo Bellantoni, Cristian Boffo, Evgeni Borissov, Harry Carter, Helen Edwards, Mike H. Foley, Ivan Gonin, Timergali N. Khabibouline, Shekhar Mishra, Donald Mitchell, Allan Rowe, Iouri Terechkine (Fermilab)

TPPT071—Preliminary Results on the Simultaneous Excitation of the TM010 and TE011 Modes in a Single Cell Niobium Cavity
Gianluigi Ciovati, Peter Kneisel (Jefferson Lab)

TPPT072—Effects of Electric and Magnetic Fields on the Performance of a Superconducting Cavity
Gianluigi Ciovati, Peter Kneisel (Jefferson Lab), Jacek Sekutowicz, Waldemar Singer (DESY)

TPPT073—Testing of the New Tuner Design for the CEBAF 12 GeV Upgrade SRF Cavities
Edward Daly, Kirk Davis, Robby Hicks (Jefferson Lab)

TPPT074—Simulation Study of Electronic Damping of Microphonic Vibrations in Superconducting Cavities
Alicia Hofler, Jean Roger Delayen (Jefferson Lab)

TPPT075—Influence of Ta Content in High Purity Niobium on Cavity Performance
Peter Kneisel, Ganapati Myneni (Jefferson Lab),

*Dieter Proch, Waldemar Singer, Xenia Singer
(DESY), Tadeu Carneiro (Reference Metals)*

TPPT076—Preliminary Results from Single Crystal and Very Large Crystal Niobium Cavities

*Peter Kneisel, Gianluigi Ciovati, Ganapati Myneni
(Jefferson Lab), Jacek Sekutowicz (DESY), Tadeu Carneiro (Reference Metals)*

TPPT077—Testing of HOM Coupler Designs on a Single Cell Niobium Cavity

*Peter Kneisel, Gianluigi Ciovati, Genfa Wu
(Jefferson Lab), Jacek Sekutowicz (DESY)*

TPPT078—Performance of Single-Cell SC Cavities for the JLab FEL 100mA Injector Upgrade Cryomodule

Joseph Paul Ozelis, John Mammoser, Jeffrey Saunders, Haipeng Wang (Jefferson Lab), Michael Cole, John Rathke, Alan Murray Melville Todd (AES)

TPPT079—Performance Overview of the Production Superconducting RF Cavities for the Spallation Neutron Source Linac

Joseph Paul Ozelis, Jean Roger Delayen, John Mammoser (Jefferson Lab)

TPPT080—Commissioning and Operational Experience With an Intermediate Upgrade Cryomodule for the CEBAF 12 GeV Upgrade

Tom Powers, Kirk Davis, Michael Allen Drury, Christiana Grenoble, Larry King, Tomasz Plawski, Joseph P. Preble (Jefferson Lab)

TPPT081—Fabrication and Testing of the SRF Cavities for the CEBAF 12 GeV Upgrade Prototype Cryomodule Renascence

Charles E. Reece, Edward Daly, Stephen Manning, Robert Manus, Samuel Morgan, Joseph Paul Ozelis, Larry Burlington (Jefferson Lab)

TPPT082—High Thermal Conductivity Cryogenic RF Feedthroughs for Higher Order Mode Couplers

Charles E. Reece, Edward Daly, Thomas Elliott, Joseph Paul Ozelis, Larry Phillips, Timothy Moore Rothgeb, Katherine Wilson, Genfa Wu (Jefferson Lab)

TPPT083—RF Conditioning and Testing of Fundamental Power Couplers for SNS Superconducting Cavity Production

Mircea Stirbet, Kirk Davis, Michael Allen Drury, Christiana Grenoble, James Henry, Ganapati Myneni, Tom Powers, Katherine Wilson, Mark Wiseman (Jefferson Lab), Isidoro Enrico Campisi, Yoon W. Kang, Daniel Stout (ORNL/SNS)

TPPT084—Surface Study of Nb/Cu Films for Cavity Deposition by ECR Plasma

Andy Ting Wu, Robert Clifton Ike, Larry Phillips, Anne-Marie Valente, Haipeng Wang, Genfa Wu (Jefferson Lab)

TPPT085—Niobium Thin Film Coating on a 500-MHz Copper Cavity by Plasma Deposition

Haipeng Wang, Larry Phillips, Robert Rimmer, Anne-Marie Valente, Andy Ting Wu, Genfa Wu (Jefferson Lab)

TPPT086—Elliptical Cavity Shape Optimization for Acceleration and High Order Modes Damping

Haipeng Wang, Robert Rimmer, Genfa Wu (Jefferson Lab)

TPPT087—Superconducting Cavity-To-Cavity

Coupling Measurement for SNS Cryomodule

Haipeng Wang (Jefferson Lab), An Sun (ORNL/SNS)

TPPT088—Power Dependence of the RF Surface Resistance of MgB₂ Superconductor

Tsuyoshi Tajima, Alp Findikoglu, Frank L. Krawczyk, Jian-Fei Liu, Fred Mueller, Alan Shapiro (LANL), Hasan Padamsee, Alexander Sergeevich Romanenko (Cornell University), Brian Moeckly (STI)

TPPT089—Commissioning and Operations Results of the Industry-Produced CESR-Type SRF Cryomodules

Sergey Belomestnykh, Roger Kaplan, Hasan Padamsee, Peter Quigley, John Reilly, James Sears, Vadim Veshcherevich (Cornell University), Stefan Bauer, Bernd Griep, Michael Knaak, Michael Pekeler, Hanspeter Vogel (ACCEL), Mark Sybe de Jong, Elder Matias, Jonathan Stampe (CLS), Chaoen Wang (NSRRC)

TPPT090—Progress of Injector Cavity Prototyping for Cornell ERL

Rong-Li Geng, Phil Barnes, Matthias Liepe, Valeri Medjidzade, Hasan Padamsee, Andrew Seaman, James Sears, Valery D. Shemelin, Karl William Smolenski (Cornell University)

TPPT091—Half-Cell Technology for Superconducting Niobium Cavity Fabrication

Rong-Li Geng, Hasan Padamsee, James Sears (Cornell University)

TPPT092—Observation of Niobium Surface Damage at a 100 MV/m RF Electric Field

Rong-Li Geng, Andrew Seaman (Cornell University)

TPPT093—RF Studies on Copper Models of the Injector Cavity for the Cornell ERL Prototype

*Matthias Liepe, Christopher Cooper, Nabil Iqbal
(Cornell University)*

TPPT094—Design of the CW Cornell ERL Injector Cryomodule

*Matthias Liepe, Sergey Belomestnykh, Rong-Li Geng,
Valeri Medjedzade, Hasan Padamsee, Valery D.
Shemelin, Vadim Veshcherevich (Cornell University)*

TPPT095—Reactive Tuners for SRF Cavities
Townsend Zwart (MIT)

TPPT096—Cryomodule Design for a Superconducting Linac with Quarter-Wave, Half-Wave, and Focusing Elements

Matthew John Johnson, John Bierwagen, Steve Bricker, Chris Compton, Patrick Glennon, Terry L. Grimm, Walter Hartung, Dionna Harvell, Adam Moblo, John Popielarski, Laura Saxton, Richard York, Al Zeller (NSCL)

TPPT097—Warm Data Gives Cold Fields
Stan Owen Schriber (NSCL)

TPPT098—VORPAL as a Tool for Three-Dimensional Simulations of Multipacting in Superconducting RF Cavities

Chet Nieter, Peter Stoltz (Tech-X), Gregory Werner (CIPS), John R. Cary (CIPS; Tech-X)

TPPT099—Prototype Superconducting Triple-Spoke Cavity for Beta = 0.62

Kenneth Shepard, Zachary Alan Conway, Fuerst, Mark Kedzie, Michael Kelly (ANL)

TPPT100—Superconducting Triple-Spoke Cavity for Beta = 0.5 Ions

Kenneth Shepard, Zachary Alan Conway, Fuerst, Mark Kedzie, Michael Kelly (ANL)

Oral Session WOAA—Linear Colliders

Ballroom A @ 8:30

Chair: G. Dugan (Cornell Univ.)

8:30 WOAA001—The International Linear Collider (ILC) Organization and Plans
Maury Tigner (Cornell Univ.)

8:55 WOAA002—Progress and Plans for R&D and the Conceptual Design of the ILC Main Linacs
Hitoshi Hayano (KEK)

9:15 WOAA003—Progress and Plans for R&D and the Conceptual Design of the ILC Injector Systems
Susanna Guiducci (INFN)

9:35 WOAA004—The ILC Beam Delivery System—Conceptual Design and R&D Plans
Andrei Seryi (SLAC)

9:55 WOAA005—Progress and Plans for R&D and the Conceptual Design of the ILC High Gradient Structures
Hasan Padamsee (Cornell Univ.)

Oral Session WOAB—Development in the South, East, and

Mid-East/Light Sources, Ballroom B @ 8:30

Chair: M. Poole (CLRC/DL)

8:30 WOAB001—The Australian Synchrotron
Alan Jackson (ASP)

8:55 WOAB002—Status of the Shanghai Synchrotron Radiation Facility Project
Zhentang Zhao, Hongjie Xu (SINAP)

9:20 WOAB003—The Brazilian Light Source
Pedro Tavares (LNLS)

9:45 WOAB004—Applying Frequency Map Analysis on the Australian Synchrotron Storage Ring
Yaw-Ren Eugene Tan, Mark James Boland, Alan Jackson, Gregory Scott LeBlanc (ASP)

10:00 WOAB005—The Status of Turkic Accelerator Complex Proposal
Saleh Sultansoy, Metin Yilmaz (Gazi University),

Omer Yavas, Orhan Cakir, Abbas Kenan Ciftci, Erdal Recepoglu (Ankara University)

**Oral Session WOAC—Single-Particle Dynamics and Optics
Ballroom C @ 8:30
Chair: V. Lebedev (FNAL)**

8:30 WOAC001—Aberration Correction in Electron Microscopy

Harald Hermann Rose (LBNL)

8:55 WOAC002—Chromatically Corrected Imaging Systems for Charged-Particle Radiography

Barbara Blind (LANL)

9:20 WOAC003—Effects of Fringe Fields and Insertion Devices Revealed Through Experimental Frequency Map Analysis

Peter Kuske (BESSY)

9:45 WOAC004—Tune Compensation and Lattice Tuning with Long FEL Wigglers in the Duke Storage Ring

Y. K. Wu, Steven M. Hartman, Jingyi Li, Stepan Mikhailov (DU/FEL)

10:00 WOAC005—Application of Independent Component Analysis for Beam Diagnosis

Xiaobiao Huang, Shyh-Yuan Lee (IUCF), Eric Prebys, Raymond E. Tomlin (Fermilab)

**Oral Session WOAB (Cont.)—Development in the South, East, and Mid-East/Light Sources, Ballroom B @ 10:40
Chair: H. Winick (SLAC)**

10:40 WOAB006—Report on Synchrotron Radiation Source Indus-2

Vinod Chandra Sahni (CAT)

11:05 WOAB007—SESAME in Jordan

Gaetano Vignola, Adel Amro, Maher Attal, Firas Makahleh, Maher Mustafa Shehab, Seadat Varnasseri (SESAME)

11:30 WOAB008—CANDLE Project Overview

Vasili Mkrtich Tsakanov (CANDLE)

11:55 WOAB009—Design, Development, Construction and Installation of a Ceramic Chamber for a Pulsed Kicker at the LNLS Storage Ring
Marcelo Juni Ferreira, Osmar Roberto Bagnato, Reginaldo de Oliveira Ferraz, Fernanda Regina Francisco, Angelo Luiz Gobbi, Rafael Molena Seraphim, Milton Batista Silva (LNLS)

12:10 WOAB010—Bunch Tracing System by Bunch by Bunch Measurement in HLS
Kai Zheng, Jian Hong Liu, Zuping Liu, Jun Hua Wang, Yong Liang Yang (USTC/NSRL)

Oral Session WOAC(Cont.)—Single-Particle Dynamics and Optics, Ballroom C @ 10:40
Chair: A. Chao (SLAC)

10:40 WOAC006—Design of Large Momentum Acceptance Transport Systems
David Douglas (JLab)

11:05 WOAC007—Beam-Based Nonlinear Optics Corrections in Colliders
Fulvi C. Pilat (BNL)

11:30 WOAC008—Measuring and Understanding the Momentum Aperture in a Storage Ring
Christoph Steier (LBNL/AFR), Winfried Decking (DESY), Y. K. Wu (DU/FEL), Jacques Laskar (IMCCE), David Robin (LBNL/ALS), Laurent Stanislas Nadolski (SOLEIL)

11:55 WOAC009—Techniques for Measurement and Correction of the SNS Accumulator Ring Optics
Stuart Henderson, Sarah M. Cousineau, Viatcheslav V. Danilov, John Galambos, Jeffrey Alan Holmes, Michael Plum (ORNL/SNS)

12:10 WOAC010—Measurement of Linear Lattice Functions in the ESRF Storage Ring Using Turn-by-Turn Data
Yannis Papaphilippou, Laurent Farvacque (ESRF), Stephanie-Louise Bailey (The College of William and Mary)

Oral Session WOAD—Lepton Accelerators and Colliders
Ballroom A @ 10:40
Chair: A. Hutton (JLab)

10:40 WOAD001—Super-B Factories
Haruyo Koiso (KEK)

11:05 WOAD002—Lepton Collider Operation with Constant Currents
Ulrich Wienands (SLAC)

11:30 WOAD004—JLab 12-GeV Upgrade
Allison Lung (JLab)

11:55 WOAD004—A High Luminosity Electron-Ion Collider To Study the Fundamental Structure of Matter
Richard Milner (MIT-Bates)

12:10 WOAD005—BEPCII Interaction Region Design and Construction Status
Yingzhi Wu (IHEP)

Poster Session WPAE—Accelerator Technology
Ballroom E, 8:30-12:20

WPAE001—Helium Distribution for the Superconducting Devices in NSRRC
Feng-Zone Hsiao, Sheng-Hsiung Chang, Wen-Song Chiou, Hsing-Chieh Li (NSRRC)

WPAE002—Safety Management for the Cryogenic System of Superconducting RF System
Sheau-Ping Kao, Fu-Dong Chang, Chien-Rong Chen, Feng-Zone Hsiao, Joseph Liu, Rong-Jiun Sheu, Jau-Ping Wang (NSRRC)

WPAE003—The Cryogenic Supervision System in NSRRC
Hsing-Chieh Li, Sheng-Hsiung Chang, Wen-Song Chiou, Feng-Zone Hsiao, Zong-Da Tsai (NSRRC)

WPAE004—Energy Recovery Linac Prototype—Cryogenic System
Robert Smith (CCLRC/DL/ASTeC)

WPAE005—Status of the Cryogenic System Commissioning at SNS

Fabio Casagrande, Daniel Hatfield, Matthew Howell, William Strong (ORNL/SNS), Dana Arenius, Jonathan Creel, Kelly Dixon, Venkataraao Ganni, Peter Knudsen (Jefferson Lab), Pamela Gurd (ORNL/ASD)

WPAE006—Local Shielded PETRACE Medical Cyclotron
Ashok Matkar, B. Karkera, S. Ojha, Kavindra Pathak (BARC)

WPAE007—Commissioning of the LNLS 2 T Hybrid Wiggler
Ruy H.A. Farias, James Francisco Citadini, Marcelo Juni Ferreira, Ana Flávia Aparecida Gouveia, Lucia Cabral Jahnel, Lin Liu, Regis Neuenschwander, Ximenes Rocha Resende, Pedro Tavares, Giancarlo Tosin (LNLS), Natalia Prado Abreu (LNLS; UNICAMP)

WPAE008—Redesign of a Low Energy Probe Head
Yi-Nong Rao, George H. Mackenzie, Thomas Ries (TRIUMF)

WPAE009—Morphological and Structural Characterizations of Silicon Bent Crystals for Extraction/Collimation of Relativistic Ion Beams
Vincenzo Guidi, Giuliano Martinelli (UNIFE, Ferrara), Walter Scandale (CERN), Valery M. Biryukov, Yuri Chesnokov (IHEP Protvino), Alberto Vomiero (INFN/LNL), Yuri M. Ivanov (PNPI)

WPAE010—Neutron Flux and Activation Calculations for a High Current Deuteron Accelerator
Sandro Sandri, Angela Coniglio, Mario Pillon (ENEA C.R. Frascati), Marco D'Arienzo (CNR/RFX)

WPAE011—Electrostatic Deflectors: New Design for High Intensity Beam Extraction
Maurizio Re, Fortunato Caruso, Giacomo Cuttone, Giovanni De Luca, Giuseppe Gallo, Antonio Grmek, Giovanni Manno, Fortunato Musarra, Santi Passarello, Emilio ZappalÀ (INFN/LNS)

WPAE012—Gamma-Ray Irradiation Experiments of Collimator Key Components for the 3GeV-RCS of J-PARC
Michikazu Kinsho, Fumihiro Masukawa, Norio Ogiwara, Osamu Takeda, Kazami Yamamoto (JAERI/J-PARC), Joichi Kusano (Japan Atomic Energy Institute)

WPAE013—Development of the Collimator System for the 3GeV Rapid Cycling Synchrotron
Kazami Yamamoto (JAERI/J-PARC)

WPAE014—Conceptual Design of a Longitudinal Halo Collimator for J-PARC Linac

*Masanori Ikegami (KEK), Tomohiro Ohkawa
(JAERI)*

**WPAE015—High Heat-Load Slits for the PLS
Multipole Wiggler**

*Kyehwan Gil, Chin Wha Chung, Hyoyun Kim,
Young-Chan Kim, Heung-Soo Lee (PAL)*

**WPAE016—Development of a Precision Amplifier
for the Detector**

*Ki-Hyeon Park, Chin Wha Chung, Suk-Mo Hong,
Seong-Hun Jeong, Young Gyu Jung, Dong Eon Kim,
Hee-Seock Lee, Wol Woo Lee (PAL), Bong-Koo Kang
(POSTECH)*

**WPAE017—Installation of the LHC Long Straight
Sections (LSS)**

Sonia Bartolome-Jimenez, Gilbert Trinquet (CERN)

**WPAE018—Performance Tests of Survey Instru-
ments Used in Radiation Fields Around High-Energy
Accelerators**

*Sabine Mayer, Doris Forkel-Wirth, Markus
Fuerstner, Christian Theis, Helmut Vincke (CERN)*

**WPAE019—How to Fill a Narrow 27 km Long Tube
with a Huge Number of Accelerator Components?**

*Yvon Muttoni, Jean-Pierre Corso, Roger Valbuena
(CERN)*

**WPAE020—A Large Diameter Entrance Window for
the LHC Beam Dump Line**

*Andrew Presland, Brennan Goddard, José Miguel
Jimenez, Raymond Veness (CERN)*

**WPAE021—The LHC Matching Sections Short
Straight Sections (MS SSS): A Design Extension of
the Arc Cryostats To Fulfill Specific Machine
Functionalities**

*Vittorio Parma, Herve Prin (CERN), Franck Lutton
(IPN)*

**WPAE022—Progress on the Liquid Hydrogen
Absorber for the MICE Cooling Channel**

Mary Anne Cummings (Fermilab)

**WPAE023—Progress on the Absorber Focus Coil
Module for the MICE Channel**

Mary Anne Cummings (Fermilab)

**WPAE024—Lasertron Effect in Electrostatic
Separator**

Alexander A. Mikhailichenko (Cornell University)

**WPAE025—Design for a 1.3 MW, 13 MeV Beam
Dump for an Energy Recovery Linac**

*Charles Kent Sinclair, Yun He, Colin Healey Smith
(Cornell University)*

WPAE026—A 1000 T/m Lithium Lens for Fermilab's Anti-Proton Source

Patrick Hurh, James Morgan, Ryan Schultz, Salman Tariq (Fermilab)

WPAE027—Magnetic Shielding of an Electron Beamline in a Hadron Accelerator Enclosure

Thomas K. Kroc, Chuck Schmidt, Alexander V. Shemyakin (Fermilab)

WPAE028—Radiation Issues for Fermilab Booster Magnets

Eric Prebys (Fermilab)

WPAE029—The Development of the 2nd Tevatron Electron Lens

Xiaolong Zhang, James L. Crisp, James A. Fitzgerald, Gennady Kuznetsov, Marvin Olson, Howard Pfeffer, Greg Saewert, Vladimir Shiltsev (Fermilab), Michael A. Tiunov (BINP SB RAS), Sergey Kozub, Veniamin Sytnik, Leonid Tkachenko (IHEP Protvino), Kip Bishofberger (UCLA)

WPAE030—Thermal Analysis of the Al Window for a New CESR-c Luminosity Monitor

Yun He, Yulin Li, Mark Alan Palmer, David Rice (Cornell University)

WPAE031—Mechanical Design of a Heavy Ion Beam Dump for the RIA Fragmentation Line

Werner Stein, Larry Ahle, Martin D. Roeben (LLNL)

WPAE032—Gamma Experiment Study System (GESS) Code

Jean-Christophe Bilheux (ORNL)

WPAE033—Beam-Induced Neutron Fluence in the PEP-II Interaction Region

Gary Bower, Jaroslav Va'vra, Dennis Wright (SLAC), William Stephen Lockman (SCIPP)

WPAE034—Fast Neutron Damage Studies on NdFeB Materials

James Spencer, James Allan, Scott Anderson, Zachary Wolf (SLAC), James T. Volk (Fermilab), David Pellet (UCD), Moe Boussoufi (UCD/MNRC)

WPAE035—SNS Ring Injection Stripped Electron Collection: Design Analysis and Technical Issues

Yong Yung Lee, George Mahler, Wuzheng Meng, Deepak Raparia, Lanfa Wang, Jie Wei (BNL)

WPAE036—Harmonic Analysis of Linac Alignment

Rodney C. McCrady (LANL/LANSCE)

WPAE037—Deformation Monitoring of the Spallation Neutron Source (SNS) Tunnels

Joseph Error, Douglas Bruce, Julius Fazekas, Scott Helus, James Maines (ORNL/SNS)

WPAE038—Resonance Control Cooling System Performance and Developments
Paul Gibson, Alexander V. Aleksandrov, Marianne M. Champion, James Phillip Schubert, Johnny Y. Tang (ORNL/SNS)

WPAE039—Optical Tooling and its Uses at the Spallation Neutron Source (SNS)
Scott Helus, Douglas Bruce, Joseph Error, Julius Fazekas, James Maines (ORNL/SNS)

WPAE040—Comparison of Techniques for Longitudinal Tuning of the SNS Drift Tube Linac
Dong-o Jeon (ORNL/SNS)

WPAE041—Development of a New Beam Diagnostics Platform
Ronald Thomas Roseberry, Saeed Assadi, Graeme R. Murdoch (ORNL/SNS)

WPAE042—Beam Loss and Residual Activation Trending
George W. Dodson, Mario Giannella, Ariel Tamika Ruffin, Theodore L. Williams (ORNL/SNS)

WPAE043—Mechanical Alignment of the Booster Injector for the Duke FEL Storage Ring
Mark Emamian, Matthew D. Busch, Stepan Mikhailov, Gary Swift (DU/FEL), Nikolai Gavrilov (BINP SB RAS)

WPAE044—An Alignment of J-PARC Linac
Takatoshi Moirshita, Hiroyuki Ao, Takashi Ito, Akira Ueno (JAERI/LINAC), Kazuo Hasegawa (JAERI), Masanori Ikegami, Chikashi Kubota, Fujio Naito, Eiichi Takasaki, Hirokazu Tanaka, Kazuo Yoshino (KEK)

WPAE045—Progress on RF Coupling Coil Module Design for the MICE Channel
Derun Li (LBNL/AFR), Michael Green, Steve Virostek, Michael Zisman (LBNL), Wing Lau, Adam White, Stephanie Yang (OXFORDphysics)

WPAE046—Diffusion Brazing and Welding of the Accelerating Structure
Vardan Avagyan (CANDLE)

WPAE048—The Analysis of the CANDLE Radiation Level Based on FLUKA Calculations
Khankanos N. Sanosyan, Raphael Mikaelyan (CANDLE)

WPAE050—First Calibrations of Alanine and Radio-Photo-Luminescence Dosimeters to a Hadronic Radiation Environment

Helmut Vincke, Isabel Brunner, Idelette Floret, Doris Forkel-Wirth, Markus Fuerstner, Sabine Mayer (CERN)

WPAE051—Commissioning Study of the In-Vacuum Wiggler on BEPC

Xinhao Wang, Jiuqing Wang, Xuemei Wen, Jun Xing (IHEP Beijing)

WPAE053—Neutronics Assessments for RIA Fragmentation Beam Dump

Jason Boles (LLNL)

WPAE054—Irradiation Effects on RIA Fragmentation Cu Beam Dump

Susana Reyes, Larry Ahle, Jason Boles, Werner Stein (LLNL), Brian Wirth (UCB)

WPAE055—Enhanced Energy Loss of 5.486 MeV Alpha Particles in Nickel at Ferromagnetic Phase Transition Temperature

Uday Kumar Khadke, Mahaveer Tavanappa Lagare (GIT)

WPAE056—Geant4-Based Simulation Study of PEP-II Beam Backgrounds in the BaBar Detector at the SLAC B-Factory

William Stephen Lockman (SCIPP), Witold Kozanecki (CEA/DSM/DAPNIA), Ben Campbell, Steven Hugh Robertson (CHEP), Mario Bondioli (INFN-Pisa), G Wormser (IPN), Nick Barlow, Christina Louise Edgar (Manchester University), David Aston, Gary Bower, Markus Cristinziani, Dennis Wright (SLAC), Brian Aagaard Petersen (Stanford University), Giovanni Calderini (UNIPI), Nicholas Louis Blount, David Strom (University of Oregon)

WPAE057—Net Shape Manufacturing of Accelerator Components by High Pressure Combustion Driven Powder Compaction

Karthik Nagarathnam (UTRON Inc)

WPAE058—High Voltage Measurements on Nine PFNs for the LHC Injection Kicker Systems

Michael John Barnes, Gary Dale Wait (TRIUMF), Laurent Ducimetière (CERN)

WPAE059—The Dynamic Response of the Parallel Resonant Circuit with the Different Power Excitation

Xin Qi, Zhongxiong Xu, jing Zhang (IHEP Beijing)

WPAE060—Programmable Power Supply for AC Switching Magnet of Proton Accelerator

Seong-Hun Jeong, Hong Sik Han, Young Gyu Jung,

*Heung-Sik Kang, Hong-Gi Lee, Ki-Hyeon Park,
Chun-Kil Ryu, Hyung Suck Suh (PAL)*

**WPAE061—LC Filter for High Accuracy and
Stability Digital MPS at PLS**
*Sung-Chul Kim, Jinhyuk Choi, Ki Man Ha, Jung Yun
Huang (PAL)*

**WPAE062—AC Power Supply for Wobbler Magnet
of the MC-50 Cyclotron**
*Yu-Seok Kim, Jong-Seo Chai (KIRAMS), Dong Eon
Kim, Wol Woo Lee, Ki-Hyeon Park (PAL), Bong-Koo
Kang (POSTECH)*

**WPAE063—CERN-PS Main Power Converter
Renovation: How To Provide and Control the Large
Flow of Energy for a Rapid Cycling Machine?**
*Frederick Bordry, Jean-Paul Burnet, Friedrich
Voelker (CERN)*

**WPAE064—“Fast-Slow” Beam Chopping for Next
Generation High Power Proton Drivers**
Michael A. Clarke-Gayther (CCLRC/RAL/ASTeC)

WPAE065—Jefferson Lab’s Trim Card II
*Trent Allison, Roger Flood, Scott Higgins, Ed
Martin, William Merz (Jefferson Lab)*

**WPAE066—PEP-II Large Power Supplies Rebuild
Program at SLAC**
*Antonio Carlos de Lira, Paul Bellomo, James J.
Lipari, Fernando da Silva Rafael (SLAC)*

**WPAE067—Testing of Custom Power Supplies at
Vendor Facilities**
*Robert Lambiase, Jon Sandberg (BNL), Kenneth R.
Rust (ORNL/SNS)*

**WPAE068—Upgrade of the AGS MMPS to 2.5 up to
5.0 Hz, Storing Additional Energy in Inductors or
Capacitors**
*Ioannis Marneris, Sorin Viorel Badea, Rodger
Bonati, Marvin Meth, Thomas Roser, Alessandro
Ruggiero, Jon Sandberg, Nicholaos Tsoupas, Wu-
Tsung Weng (BNL)*

**WPAE069—The APS Septum Magnet Power
Supplies Upgrade**
*Boris Deriy, AL Hillman, Gary Sprau, Ju Wang
(ANL)*

**WPAE070—Injector Power Supplies Reliability
Improvements at the Advanced Photon Source**
*AL Hillman, Stanley Joseph Pasky, Nicholas Sereno,
Robert Soliday, Ju Wang (ANL)*

WPAE071—Power Supply for Magnet of Compact Proton and/or Heavy Ion Synchrotron for Radiotherapy

Shinji Yamanaka, Kazumi Egawa, Kuninori Endo, Zhigao Fang (KEK)

WPAE072—Installation and Testing of SNS Magnet Power Supplies

Kenneth R. Rust, William E. Barnett, Roy I. Cutler, Joey T. Weaver (ORNL/SNS), Robert Lambiase, Jon Sandberg (BNL), Jiaqi Zeng (Digital Predictive Systems Inc.), Shashi Dewan, Robert Holmes, Sam Wong (IE Power Inc.)

WPAE073—3 kA Power Supplies for the Duke OK-5 FEL Wigglers

Victor Popov, Steven M. Hartman, Stepan Mikhailov, Owen Oakeley, Patrick Walter Wallace, Y. K. Wu (DU/FEL)

WPAE074—Trim Power Supplies for the Duke Booster and Storage Ring

Victor Popov, Steven M. Hartman, Stepan Mikhailov, Owen Oakeley, Patrick Walter Wallace, Y. K. Wu (DU/FEL)

WPAE075—Compact Digital High Voltage Charger

Ge Li, Yingui Zhou (USTC/NSRL)

WPAE077—Booster Ring Power Converters for Filling Up Synchrotron Light Source Storage Rings

Alexander Elkjaer, Lars Kruse (Danfysik A/S)

WPAE078—The Current State of the ISIS Main Magnet Power Supply Upgrade

Andrew Kimber, James Gray, Adrian Morris, Steve West (CCLRC/RAL/ISIS)

WPAE079—Dual Power Supplies for PEP-II Injection Kickers

Franz-Josef Decker, Artem Kulikov, Chris Pappas (SLAC)

WPAE080—Development of the Pulsed Source Prototype for BEPCII New Type Kicker

Jinhui Chen, Qian Han, Wen Kang, Xianzu Wei (on leave) (IHEP)

WPAE081—1.12 MVA Tracking Design of Two Pulse Switch Mode Power Supplies for the SNS Injection Bump Magnets

Shashi Dewan, Robert Holmes, Sam Wong (IE Power Inc.), Wahfun Eng, Robert Lambiase, Jon Sandberg (BNL), Jiaqi Zeng (Digital Predictive Systems Inc.), Kenneth R. Rust (ORNL/SNS)

WPAE082—Design of a Precision Positioning System for the Undulators of the Linac Coherent Light Source
E. Trakhtenberg (ANL)

Poster Session WPAP—Sources and Injectors
Park Concourse 8:30-12:20

WPAP001—HELIOS, the Linac Injector of SOLEIL: Installation and First Results
Bruno Pottin, Roger Chaput, Jean-Pierre Pollina, Marie-Agnès Tordeux (SOLEIL), Dominique Jousse, Jean-Luc Pastre, Andrew Setty (THALES)

WPAP002—A High Duty Cycle Photo Gun for the BESSY Soft X-Ray FEL
Frank Marhauser (BESSY GmbH, Berlin)

WPAP003—Emission Mechanisms in a Photocathode RF Gun
Jang Hui Han, Juergen W. Baehr, Hans-Juergen Grabosch, Mikhail Krasilnikov, Velizar Miltchev, Anne Oppelt, Bagrat Petrosyan, Lazar Staykov, Frank Stephan (DESY Zeuthen), Michael Hartrott (BESSY GmbH), Klaus Floettmann (DESY)

WPAP004—Dark Current and Multipacting in the Photocathode RF Guns at PITZ
Jang Hui Han, Juergen W. Baehr, Hans-Juergen Grabosch, Mikhail Krasilnikov, Velizar Miltchev, Anne Oppelt, Bagrat Petrosyan, Lazar Staykov, Frank Stephan (DESY Zeuthen), Michael Hartrott (BESSY GmbH), Klaus Floettmann (DESY)

WPAP005—Beam-Based Procedures for RF Guns
Mikhail Krasilnikov, Juergen W. Baehr, Hans-Juergen Grabosch, Jang Hui Han, Velizar Miltchev, Anne Oppelt, Bagrat Petrosyan, Lazar Staykov, Frank Stephan (DESY Zeuthen), Michael Hartrott (BESSY GmbH)

WPAP006—Recent Developments at PITZ
Mikhail Krasilnikov, Juergen W. Baehr, Ulrich Gensch, Hans-Juergen Grabosch, Jang Hui Han, Sergiy Khodyachykh, Shengguang Liu, Velizar Miltchev, Anne Oppelt, Bagrat Petrosyan, Sabine Riemann, Juliane Roensch, Lazar Staykov, Frank Stephan (DESY Zeuthen), Michael Hartrott, Eberhard Jaeschke, Dieter Krämer, Dirk Lipka, Dieter Richter (BESSY GmbH), Karen Abrahamyan (on leave) (DESY Zeuthen; YerPhI), Jean-Paul Carneiro, Klaus Floettmann, Siegfried Schreiber (DESY), Galina Asova, Gancho Dimitrov (on leave),

Gancho Dimitrov (DESY; INRNE), Paolo Michelato, Laura Monaco, Carlo Pagani, Daniele Sertore (INFN/LASA), Ivan Tsakov (INRNE), Wolfgang Sandner, Ingo Will (MBI), Wolfgang Ackermann, Wolfgang F.O. Müller, Sascha Schnepf, Thomas Weiland (TEMF), Jörg Rossbach (Uni HH)

WPAP007—Status of the 3½ Cell Superconducting RF Gun Project in Rossendorf

Rong Xiang, Hartmut Buettig, Pavel Evtushenko, Dietmar Janssen, W.-D. Lehmann, Ulf Lehnert, Peter Michel, Karsten Moeller, Christof Schneider, Rico Schurig, Juergen Stephan, Jochen Teichert (FZR), Thorsten Kamps (BESSY GmbH), Vladimir Volkov (BINP SB RAS), Dirk Lipka (DESY), Ingo Will (MBI)

WPAP008—Simulation for a New Polarized Electron Injector (SPIN) for the S-DALINAC

Bastian Steiner, Wolfgang F.O. Müller, Thomas Weiland (TEMF), Joachim Enders, Hans-Dieter Gräf, Achim Richter, Markus Roth (TU Darmstadt)

WPAP009—Optimization of RF Compressor in the SPARX Injector

Concetta Ronsivalle (ENEA C.R. Frascati), Luca Serafini (INFN-Milano), Manuela Boscolo, Massimo Ferrario, Bruno Spataro (INFN/LNF)

WPAP010—Intense Electron Beams from a Non-Equilibrium Plasma Generated by a UV Laser Beam
Vincenzo Nassisi, Fabio Belloni, Domenico Doria, Lucia Marra, Luigi Martina (INFN-Lecce)

WPAP011—SPARC Working Point Optimization for a Bunch with Gaussian Temporal Profile

Manuela Boscolo, Massimo Ferrario, Valeria Fusco (INFN/LNF), Concetta Ronsivalle (ENEA C.R. Frascati), Mauro Migliorati (Rome University La Sapienza), Sven Reiche (UCLA)

WPAP012—Dynamics of Photo-Generated Electron Beams in the SPARC Accelerator

Manuela Boscolo, Massimo Ferrario (INFN/LNF), Fabrizio Castelli, Simone Cialdi, Alessandro Federico Flacco (INFN-Milano), Mauro Migliorati (Rome University La Sapienza)

WPAP013—Magnesium Film Photocathodes for High Brilliance Electron Injectors

Franco Tazzioli, Carlo Vicario (INFN/LNF), Ilario Boscolo, Simone Cialdi (INFN-Milano), Luca Cultrera, Alessio Perrone (Lecce University), Marco Rossi (Rome University La Sapienza), Silvia Orlanducci, Maria Letizia terranova (Università di Roma II Tor Vergata)

WPAP014—Development of Electron Gun of Carbon Nanotube Cathode

Yasufumi Hozumi (GUAS/AS), Mitsuo Ikeda, Satoshi Ohsawa, Takashi Sugimura (KEK)

WPAP015—Simulation Study of KEKB Positron Source for SuperKEKB

Takuya Kamitani, Yukiyoshi Ohnishi, Kazue Yokoyama (KEK)

WPAP016—High Brightness Electron Gun for X-Ray Source

Satoshi Ohsawa, Mitsuo Ikeda, Takashi Sugimura, Masafumi Tawada (KEK), Yasufumi Hozumi (GUAS/AS)

WPAP017—Experimental Observation of a 100fs Single Electron Bunch in Photocathode Linac with Longitudinal Emittance Compensation Technique

Jinfeng Yang (RCNP), Takafumi Kondoh, Takahiro Kozawa, Seiichi Tagawa, Yoichi Yoshida (ISIR)

WPAP018—Generation of Double-Decker Femtosecond Electron Beams in a Photoinjector

Jinfeng Yang (SHI), Takafumi Kondoh, Takahiro Kozawa, Seiichi Tagawa, Yoichi Yoshida (ISIR)

WPAP019—X-Band Thermionic Cathode RF Gun at UTNL

Atsushi Fukasawa, Futaro Ebina, Tatsuo Kaneyasu, Haruyuki Ogino, Fumito Sakamoto, Mitsuru Uesaka, Tomohiko Yamamoto (UTNL), Mitsuo Akemoto, Hitoshi Hayano, Toshiyasu Higo, Junji Urakawa (KEK), Katsuhiro Dobashi (NIRS)

WPAP020—The Study of Electron Beam Dynamics in Photocathode RF Gun with Variable Length of the Half Cell

Xiao Jin (CAEP/IAE)

WPAP021—Status of PPI (Pohang Photo-Injector) for PAL XFEL

Sung-Ju Park, In Soo Ko, Jong-Seok Oh, Yong Woon Parc, Chong-Do Park, Jangho Park (PAL), Xijie Wang (BNL/NSLS)

WPAP022—Measurements of Transverse Emittance for RF Photocathode Gun at the PAL

Jangho Park, In Soo Ko, Jong-Seok Oh, Yong Woon Parc, Sung-Ju Park (PAL), Xijie Wang (BNL/NSLS), Dao Xiang (TUB)

WPAP023—200 keV Compact Source of Electron Beam with Average Power of 2 kW

Ivan Kazarezov, Vadim Auslender, Alex Bryazgin, Alexandre Bulatov, Ivan Glazkov, Evgeny Kokin, Gennady Ivanovich Kuznetsov, Andrey Molokoedov, Vladimir Balakin, Gennady Krainov (BINP SB RAS)

WPAP024—On the Theory of Photocathode RF Guns

Jie Gao (IHEP Beijing)

WPAP027—RF Electron Gun with Driven Plasma Cathode

Igor Khodak, Volodymyr Kushnir (NSC/KIPT)

WPAP028—Modes of Electron Beam Generation in a Magnetron Diode with a Secondary-Emission Cathode

Valeriy Zakutin, Anatoly Nikolayevich Dovbnya, Nikolay Reshetnyak (NSC/KIPT)

WPAP029—The ERLP Photo-Injector

Douglas M. Dykes (CCLRC/DL/ASTeC)

WPAP031—Use of Multiobjective Evolutionary Algorithms in High Brightness Electron Source Design

Ivan Vasilyevich Bazarov, Igor Senderovich, Charles Kent Sinclair (Cornell University)

WPAP032—Emittances Studies at the Fermilab/NICADD Photoinjector Laboratory

Rodion Tikhoplav, Adrian C. Melissinos (Rochester University), Jianliang Li, Philippe Regis-Guy Piot (Fermilab)

WPAP033—State-of-the-Art Electron Guns and Injector Designs for Energy Recovery Linacs (ERL)

Alan Murray Melville Todd, Hans Bluem, Michael Cole, John Rathke, Tom Schultheiss, Vincent Christina (AES), John Wesley Lewellen (ANL), Ilan Ben-Zvi, Andrew Burrill, Rama Calaga, Xiangyun Chang, Dmitry Kayran, Vladimir N. Litvinenko, Triveni Rao (BNL), Jacek Sekutowicz (DESY), Dietmar Janssen (FZR), Edward Daly, David Douglas, Carlos Hernandez-Garcia, Peter Kneisel, George R. Neil, Larry Phillips, Joseph P. Preble, Robert Rimmer, Claus Rode, Tim Siggins, Timothy Whitlach, Mark Wiseman (Jefferson Lab), Patrick Colestock, John Patrick Kelley, Sergey Kurennoy, Dinh Cong Nguyen, Steven Russell, Richard L. Wood (LANL), Dale L. Schrage (LANL/LANSCE), Isidoro Enrico Campisi (ORNL/SNS), Lloyd Martin Young (TechSource)

WPAP034—Studies of Possible ILC Positron Source Commissioning Using Target Scattered Electron Beam

Haitao Wang, Wei Gai, Wanming Liu (ANL)

WPAP035—Emittance Compensation in Flat Beam Production in an RF Gun Linac

Shaoheng Wang (ANL)

WPAP036—Determination of the Field Enhancement Factor on Photocathode Surface Via the Schottky Effect

Zikri Yusof, Manoel Conde, Wei Gai (ANL)

WPAP037—Novel Method of Emittance Preservation in ERL Merging System in Presence of Strong Space Charge Forces

Dmitry Kayran, Vladimir N. Litvinenko (BNL)

WPAP038—Photoemission Studies on BNL/AES/JLab all Niobium, Superconducting RF Injector

Triveni Rao, Ilan Ben-Zvi, Andrew Burrill, Harald Hahn, Dmitry Kayran, Yongxiang Zhao (BNL), Michael Cole (AES), Peter Kneisel (Jefferson Lab)

WPAP039—Progress on Lead Photocathodes for Superconducting Injectors

John Smedley, Triveni Rao (BNL), Jacek Sekutowicz (DESY), Peter Kneisel (Jefferson Lab), Richard Lefferts, Andrzej Lipski (SBUNSL)

WPAP040—High-Brightness R&D Facility at the PAL

Xijie Wang (BNL/NSLS), Hyotcherl Ihee (KAIST), Sung-Ju Park, Yong Woon Park (PAL), In Soo Ko, Jangho Park (PAL; POSTECH), Dao Xiang (TUB)

WPAP041—Time Dependent Quantum Efficiency and Dark Current Measurements in an RF Photo-Injector with a High Quantum Efficiency Photocathode

Raymond Patrick Fliller, Helen Edwards (Fermilab), Walter Hartung (NSCL)

WPAP042—Progress on Using NEA Cathodes in an RF Gun

Raymond Patrick Fliller, Helen Edwards (Fermilab), Hans Bluem, John Rathke (AES), Charles Kent Sinclair (Cornell University), Markus Huening (DESY)

WPAP043—Production of Transverse Controllable Laser Density Distribution in Fermilab/NICADD Photoinjector

Jianliang Li, Philippe Regis-Guy Piot (Fermilab), Adrian C. Melissinos, Rodion Tikhoplav (Rochester University)

WPAP044—Advanced Electromagnetic Analysis for Electron Source Geometries

Mark Hess (IUCF)

WPAP045—Ion Back-Bombardment of GaAs Photocathodes Inside DC High Voltage Electron Guns

Joseph Michael Grames, Phillip Adderley, Joshua Brittian, Daniel Charles, Jim Clark, John

*Hansknecht, Matthew Poelker, Marcy Lynn Stutzman,
Kenneth Eric Surles-Law (Jefferson Lab)*

WPAP046—Injection Options for 12 GeV CEBAF Upgrade

*Reza Kazimi, Jay Benesch, Joseph Michael Grames,
Geoffrey Arthur Krafft, Michael Tiesenback, Byung
Chel Yunn, Yuhong Zhang (Jefferson Lab)*

WPAP047—Preliminary Results from a Superconducting Photocathode Sample Cavity

*Peter Kneisel (Jefferson Lab), Jacek Sekutowicz
(DESY), Andrzej Lipski (SBUNSL)*

WPAP048—Meeting Extremely Demanding Beam Specifications for Parity Violation Experiments

*Matt Poelker, Phillip Adderley, Joshua Brittian,
Daniel Charles, Jim Clark, Joseph Michael Grames,
John Hansknecht, Marcy Lynn Stutzman, Kenneth
Eric Surles-Law (Jefferson Lab)*

WPAP049—A High-Gradient CW RF Photocathode Electron Gun for High Current Injectors

Robert Rimmer (Jefferson Lab)

WPAP050—High Average Current DC GaAs Photocathode Gun for ERLs and FELs

*Carlos Hernandez-Garcia, Stephen Vincent Benson,
Don Bullard, Fred H. Dylla, Kevin Jordan, George
R. Neil, Michelle Diane Shinn, Tim Siggins, Richard
Lee Walker (Jefferson Lab)*

WPAP051—Field Emission Measurements from Cesium Titanium and Stainless Steel Electrodes

*Kenneth Eric Surles-Law, Phillip Adderley, Joshua
Brittian, Daniel Charles, Jim Clark, Joseph Michael
Grames, John Hansknecht, Matthew Poelker, Marcy
Lynn Stutzman (Jefferson Lab)*

WPAP052—Monte Carlo Transverse Emittance Study on Cs₂Te

*Francesco Banfi, Gabriele Ferrini, Gianluca Piero
Galimberti, Claudio Giannetti, Stefania Pagliara,
Fulvio Parmigiani, Emanuele Pedersoli (Università
Cattolica-Brescia), Barbara Ressel (ELETTRA),
John Corlett, Steven M Lidia (LBNL)*

WPAP053—Quantum Efficiency Measurements of Femtosecond Vectorial Photoemission on Cu Photocathodes

*Francesco Banfi, Gabriele Ferrini, Gianluca Piero
Galimberti, Claudio Giannetti, Stefania Pagliara,
Fulvio Parmigiani, Emanuele Pedersoli (Università
Cattolica-Brescia), Barbara Ressel (ELETTRA),
John Corlett, Steven M Lidia (LBNL)*

WPAP054—Tailored Laser Pulses for High Brightness Electron Beam Production
Steven M. Lidia (LBNL)

WPAP055—A 3D Parallel Beam Dynamics Code for Modeling High Brightness Beams in Photoinjectors
Ji Qiang, Steven M Lidia (LBNL), Robert Ryne (LBNL/CBP), Cecile Limborg-Deprey (SLAC)

WPAP056—Beam Study at Different Energy of CAMD Injector
Yanshan Wang, Mikhail Fedurin, Victor Paul Suller (LSU/CAMD)

WPAP057—Three-Dimensional Theory and Simulation of an Ellipse-Shaped Charged-Particle Beam Gun
Ronak Bhatt, Chiping Chen (MIT/PSFC)

WPAP058—The ILC Polarized Electron Source
Axel Brachmann, James E. Clendenin, Edward Garwin, Robert Kirby, Dah-An Luh, Takashi Maruyama, David Schultz, John Sheppard (SLAC), Richard Prepost (UW-Madison/PD)

WPAP059—The Orion Photoinjector
Dennis Thomas Palmer, Eric R. Colby, Robert Noble, Robert Siemann, James Spencer, Dieter Walz (SLAC), James Rosenzweig (UCLA)

WPAP060—Asymmetric Transverse Phase Space Measurements from an S-Band Photocathode RF Gun
John Schmerge, John Castro, James E. Clendenin, David Dowell, Stephen Gierman (SLAC), Steven M. Lidia (LBNL/AFR)

Poster Session WPAT—Radio-Frequency Systems
Meeting Room 200 A-C, 8:30-12:20

WPAT001—HFSS Simulation of Vacuum Tube RF Power Amplifiers
Vladimir Zviagintsev, Iouri Bylinskii (TRIUMF)

WPAT002—High Power (35 kW and 190 kW) Solid State Amplifiers for the SOLEIL Synchrotron
Patrick Marchand, Massamba Diop, Robert Lopes, Jean Polian, Fernand Ribeiro, Ti Ruan (SOLEIL)

WPAT003—Glycol-Substitute for High Power RF Water Loads
Michael Ebert, Frank-Reinhard Ullrich (DESY)

WPAT004—Coupling Methods for Room Temperature and Superconducting CH-Cavities

Holger Liebermann, Holger Podlech, Ulrich Ratzinger, Andreas Christoph Sauer (IAP)

WPAT005—System Mode Sounding (SMS) Tuning: A Non-Invasive Field Optimization Technique

Vittorio Giorgio Vaccaro (Naples University Federico II), Tarcisio Clauser, Antonio Rainò, Vincenzo Variale (INFN-Bari), Carlo De Martinis, Dario Giove (INFN-Milano), Maria Rosaria Masullo (INFN-Napoli), Marco Mauri (INFN/LASA), Alessandro D'Elia (Naples University Federico II and INFN)

WPAT006—The SPARC RF Synchronization System

Alessandro Gallo, David Alesini, Marco Bellaveglia, Roberto Boni, Giampiero Di Pirro, Franco Tazzioli (INFN/LNF)

WPAT007—Control Loops for the J-PARC RCS Digital Low-Level RF Control

Alexander Schnase, Masahiro Nomura, Fumihiko Tamura, Masanobu Yamamoto (JAERI/J-PARC), Shozo Anami, Eizi Ezura, Keigo Hara, Chihiro Ohmori, Akira Takagi, Masahito Yoshii (KEK)

WPAT008—Recent Status of RF Source in J-PARC Linac

Etsuji Chishiro, Toshihiko Hori, Hiroyuki Suzuki, Masayoshi Yamazaki (JAERI), Shozo Anami, Shigeki Fukuda, Yuji Fukui, Masato Kawamura, Seiya Yamaguchi, Mitsuhiro Yoshida (KEK)

WPAT009—Status of the RF System for the 6.5-GeV Synchrotron Light Source PF-AR

Shogo Sakanaka, Kiyokazu Ebihara, Shigeru Isagawa, Masaaki Izawa, Tatsuya Kageyama, Toshio Kasuga, Hiroshi Nakanishi, Masaaki Ono, Hiroshi Sakai, Takeshi Takahashi, Kensei Umemori (KEK)

WPAT010—RF Dielectric Properties of SiC Ceramics and their Application to Design of HOM Absorbers

Yasunao Takeuchi, Tetsuo Abe, Tatsuya Kageyama, Hiroshi Sakai (KEK)

WPAT011—Application of TRL Calibration in Longitudinal Coupling Impedance Measurement Platform for BEPCII

Gang Huang, Huang Wenhui, Shuxin Zheng (Tsinghua University), Jiuqing Wang, Demin Zhou (IHEP Beijing)

WPAT012—Status and Test Results of HPRF System for PEFP

Kyung Tae Seol, Yong-Sub Cho, Han-Sung Kim, Hyeok-Jung Kwon, Mi-Young Park, Young-Gi Song (KAERI)

WPAT013—Operation and Performance of CW Klystron Amplifier for the PLS Storage Ring
Myung-Hwan Chun, Yeung-Jin Han, Jung Yun Huang, Maeng Hyo Jeong, Sang-Hoon Nam, Hong-Jip Park, Jaeseok Yang, In-Ha Yu (PAL)

WPAT014—Sequence Control System of 1-MW CW Klystron for the PEFP
Byoung Ryul Park, Jinhyuk Choi, Myung-Hwan Chun, Yeung-Jin Han, Maeng Hyo Jeong, Sung-Chul Kim, Jaeseok Yang, In-Ha Yu (PAL)

WPAT015—The Digital Feedback RF Control System of the RFQ and DTL1 for 100 MeV Proton Linac of PEFP
In-Ha Yu, Yeung-Jin Han, Heung-Sik Kang, Do Tae Kim, Sung-Chul Kim, In-Soo Park, Jong Chel Yoon (PAL), Yong-Sub Cho, Hyeok-Jung Kwon, Kyung Tae Seol (KAERI)

WPAT016—Stable Low Noise RF Source for Main Ring
Grigory Yakovlevich Kurkin (BINP SB RAS), Ping Wang (DU/FEL)

WPAT017—Commissioning of the New RF System with the HOM Damped RF Cavity
Grigory Yakovlevich Kurkin, Vladimir Sergeevich Arbuzov, Eduard Gorniker, Ermek Kenjebulatov, Alexey Anatolyevich Kondakov, Sergey Alexandrovich Krutikhin, Igor Kuptsov, Sergey Viktorovich Motygin, Vadim Nikolaevich Osipov, Victor Petrov, Andrey Pilan, Alexey Mikhailovich Popov, Evgeniy Rotov, Igor Sedlyarov, Alexey G Tribendis, Vladimir Volkov (BINP SB RAS), Stepan Mikhailov, Patrick Walter Wallace, Ping Wang, Y.K. Wu (DU/FEL)

WPAT018—The LEIR RF System
Mauro M. Paoluzzi, Roland Garoby, Matthias Haase, Pierre Maesen, Carlo Rossi (CERN), Chihiro Ohmori (KEK)

WPAT019—Beam Tests of a New Digital Beam Control System for the CERN LEIR Accelerator
Maria-Elena Angoletta, Joao Bento, Alfred Blas, Alan Findlay, Pawel Matuszkiewicz, Flemming Pedersen, Angela Salom. Sarasqueta (CERN), Joseph DeLong (BNL)

WPAT020—Electronics System for Superconducting RF Module at the NSRRC
Meng-Shu Yeh (NSRRC)

WPAT021—RF Supply Systems for Technological Accelerators
Yuriy D. Tur, Vladimir Beloglazov, Anatoly Nikolayevich Dovbnya, Leonid Dovbush, Anatoliy

*Khudyakov, Alexander Kosoy, Tatyana Nikitina,
Sergey Shkirida (NSC/KIPT)*

WPAT022—Low Level RF System for the Energy Recovery Linac Prototype
Andrew Moss (CCLRC/DL/ASTeC)

WPAT023—Combining Cavity for RF Power Sources: Higher Power Testing and Further Simulation
Emma Wooldridge, Peter Andrew Corlett, James Henry Paul Rogers (CCLRC/DL/ASTeC)

WPAT024—First Results from the Use of Dual Harmonic Acceleration on the ISIS Synchrotron
Dean Adams, Ian Gardner, Christopher M. Warsop (CCLRC/RAL/ASTeC), Derek Bayley, Robin Bendall, Mike Glover, Adrian Morris, Andrew Seville, John Thomason (CCLRC/RAL/ISIS)

WPAT025—First Results of the IOT Based 300 kW 500 MHz Amplifier for the Diamond Light Source
Morten Jensen, Matt Maddock, Simon Rains, Alun Vaughan Watkins (Diamond), Juergen Alex, Marc Mueller (Thales Broadcast & Multimedia AG)

WPAT026—Status of 34 GHZ, 45 MW Pulsed Magnicon
Oleg A. Nezhevenko, Vyacheslav P. Yakovlev (Omega-P, Inc.), Evgueni Kozyrev (BINP SB RAS), Sergey V. Shchelkunov (Columbia University), Jay L. Hirshfield (Omega-P, Inc.; Yale University), Michael A. LaPointe (Yale University)

WPAT027—Recent Results from the X-Band Pulsed Magnicon Amplifier
Oleg A. Nezhevenko, Vyacheslav P. Yakovlev (Omega-P, Inc.), Evgueni Kozyrev (BINP SB RAS), Allen Kinkead (LET), Arnold Fliflet, Steven H. Gold (NRL), Jay L. Hirshfield (Omega-P, Inc.; Yale University), Michael A. LaPointe (Yale University)

WPAT028—High Power Ferroelectric Switches at Centimeter and Millimeter Wavelengths
Vyacheslav P. Yakovlev, Oleg A. Nezhevenko (Omega-P, Inc.), Jay L. Hirshfield (Omega-P, Inc.; Yale University)

WPAT029—The RF Experimental Program in the Fermilab Muon Test Area
Jim Norem (ANL), Rikard Sandstrom (CUI), Alfred Moretti (Fermilab), Yagmur Torun (IIT), Robert Rimmer (Jefferson Lab), Derun Li, Michael Zisman (LBNL), Rolland Johnson (Muons, Inc)

WPAT030—Upgrade of the ATLAS Positive Ion Injector Bunching System

*Sergey I. Sharamentov, John Bogaty, Benn Cliff,
Richard Claude Pardo (ANL)*

WPAT031—Design and Operation of a High Power L-Band Multiple Beam Klystron

*Adam Balkcum, Heinz Peter Bohlen, Mark Cattelino,
Lydia Cox, Mike Cusick, Scott Forrest, Fred Friedlander,
Armand Staprans, Edward Wright, Lou Zitelli
(CPI), Kenneth Eppley (SAIC)*

WPAT032—Large Scale Production of 805-MHz Pulsed Klystrons for SNS

Stephan Lenci, Edward Lawrence Eisen (CPI)

WPAT033—Design & Tests of a High Powered YIG Coaxial Phase Shifter

*G. William Foster, Emanuela Barzi, Ivan Gonin,
Steven Hays, Vladimir Kashikhin, Timergali N.
Khabibouline, Nikolay Solyak, Ding Sun, Iouri
Terechkine, David Wildman (Fermilab), Douglas
Horan (ANL)*

WPAT034—The CEBAF Separator Cavity Resonance Control System

*Mark J. Wissmann, Al Andres Guerra, Curt Hovater,
Tomasz Plawski (Jefferson Lab)*

WPAT035—The LANSCE 805 MHZ RF System History and Status

*Michael Lynch, Paul J. Tallerico (LANL), Gerry
Bolme (LANL/LANSCE)*

WPAT036—A 700 MHZ, 1 MW CW RF System for a FEL 100mA RF Photoinjector

*William Reass, Michael Lynch, Dinh Cong Nguyen,
Daniel Rees, Paul J. Tallerico (LANL), William
Roybal (LANL/LANSCE)*

WPAT037—LANSCE RF System Refurbishment

*Daniel Rees, Joseph Bradley, Michael Lynch,
William Reass, Paul J. Tallerico (LANL), Gerry
Bolme, Sung-il Kwon, John T.M. Lyles, Mark Prokop
(LANL/LANSCE)*

WPAT038—Instability of the RF Control Loop in the Presence of a High-Q Passive Superconducting Cavity

*Sergey Belomestnykh, Roger Kaplan, John Reilly,
Vadim Veshcherevich (Cornell University)*

WPAT039—Experience with the New Digital RF Control System at the CESR Storage Ring

*Matthias Liepe, Sergey Belomestnykh, John Dobbins,
Roger Kaplan, Charles Ralph Strohman, Benjamin
Kojm Stuhl (Cornell University)*

WPAT040—Pushing the Limits: RF Field Control at High Loaded Q

*Matthias Liepe, Sergey Belomestnykh, John Dobbins,
Roger Kaplan, Charles Ralph Strohman, Benjamin
Kojm Stuhl (Cornell University), Curt Hovater,
Tomasz Plawski (Jefferson Lab)*

**WPAT041—Klystron Linearizer for Use with 1 MW
476 MHz Klystrons in PEP-II RF Systems**
*John Fox, Themis Mastorides, Dmitry Teytelman,
Daniel Van Winkle, Yubo Zhou (SLAC)*

**WPAT042—Parallel Adaptive Mesh Refinement for
Improving Quality Factor Determination**
*Lixin Ge, Kwok Ko, Lie-Quan Lee, Zenghai Li, Cho-
Kuen Ng (SLAC)*

WPAT043—RF Systems for LCLS
*Peter McIntosh, Ron Akre, Richard Boyce, Paul
Emma, Alan Hill, Carl Rago (SLAC)*

WPAT044—An X-Band RF System for LCLS
*Peter McIntosh, Ron Akre, William Brooks, Paul
Emma, Carl Rago (SLAC)*

**WPAT045—A Non-Invasive Technique for Configuring
Low Level RF Feedback Loops in PEP-II**
Dmitry Teytelman (SLAC)

**WPAT046—RF Systems for SPEAR3 and Booster at
SSRL**
Sanghyun Park (SLAC)

**WPAT047—Solid-State Two Megawatt Klystron
Power Control System**
*Michael Kempkes, Jeffrey Casey, Marcel Gaudreau,
Timothy Hawkey, J. Michael Mulvaney, Ian Roth
(Diversified Technologies, Inc.)*

**WPAT048—Solid State Modulators for the International
Linear Collider (ILC)**
*Michael Kempkes, Jeffrey Casey, Marcel Gaudreau,
Timothy Hawkey, J. Michael Mulvaney, Ian Roth
(Diversified Technologies, Inc.)*

**WPAT049—The Penetrability of a Thin Metallic
Film Inside the RF Field**
*Yongxiang Zhao, Ilan Ben-Zvi, Rolf Beuttenmuller,
Xiangyun Chang, Wei Chen, Robert Di Nardo,
Triveni Rao (BNL)*

WPAT050—High Power Phase Shifter
*Iouri Terechkine, G. William Foster, Ivan Gonin,
Timergali N. Khabibouline, Alexander Makarov,
Nikolay Solyak, David Wildman (Fermilab)*

**WPAT051—Development of Toshiba L-Band Multi-
Beam Klystron for DESY X-FEL Project**
*Yong Ho Chin (KEK), Stefan Choroba (DESY), Yano
Atsunori, Setsuo Miyake (TOSHIBA)*

WPAT052—Present Status of RF System for Medical Proton Synchrotron

Zhigao Fang, Kazumi Egawa, Kuninori Endo, Shinji Yamanaka (KEK), Yuichi Cho, Tetsuo Fusato, Teruhisa Hirashima (DKK)

WPAT053—Dip Test, the Quick Measurement of Cathode Activity of the High Power Klystron in KEKB Injector Linac

Katsumi Nakao, Shigeki Fukuda, Hiroaki Katagiri, Toshihiro Matsumoto, Shinichiro Michizono, Tateru Takenaka, Yoshiharu Yano, Mitsuhiro Yoshida (KEK)

WPAT054—5 MW 805 MHz SNS RF System Experience

Karen Ann Young, Thomas Hardek, William Roybal (LANL/LANSCE), Joseph Bradley, Michael Lynch, Daniel Rees, Paul J. Tallerico (LANL)

WPAT055—Enhancements for the 1 MW High Voltage Converter Modulator Systems at the SNS

David E. Anderson, Jim Hicks, Eddie Tapp, Mark Wezensky (ORNL/SNS), David Baca, William Reass (LANL), Donald Hurst (ORNL), Vladimir V. Peplov (RAS/INR)

WPAT056—60 Hz Operation of the 1 MW of the High Voltage Converter Modulator at the SNS

David E. Anderson, Jim Hicks, Eddie Tapp, Mark Wezensky (ORNL/SNS), David Baca, Robin F. Gribble, William Reass (LANL), Vladimir V. Peplov (RAS/INR)

WPAT057—Overview of the Spallation Neutron Source Linac Low-Level RF Control System

Mark Champion, Mark Crofford, Kay-Uwe Kasemir, Hengjie Ma, Maurice Piller (ORNL/SNS), Lawrence Doolittle, Alessandro Ratti (LBNL)

WPAT058—Operational Experience with the Spallation Neutron Source High Power Protection Module

Mark Crofford, Mark Champion, Kay-Uwe Kasemir, Hengjie Ma, Maurice Piller (ORNL/SNS)

WPAT059—High Power RF Test Facility at the SNS

Yoon W. Kang, David E. Anderson, Isidoro Enrico Campisi, Mark Champion, Mark Crofford, Ray E. Fuja, Michael P. McCarthy, Daniel Stout, Alexandre Vasilievich Vassioutchenko, Mark Wezensky (ORNL/SNS), S.M. Shajedul Hasan (University of Tennessee)

WPAT060—SNS Low-level RF Control System: Design and Performance

Hengjie Ma, Mark Champion, Mark Crofford, Kay-Uwe Kasemir, Maurice Piller (ORNL/SNS), Lawrence Doolittle, Alessandro Ratti (LBNL)

WPAT061—Spallation Neutron Source High Power RF Installation and Conditioning Progress

Michael P. McCarthy, David E. Anderson, Ray E. Fuja, Yoon W. Kang (ORNL/SNS), Joseph Bradley, Daniel Rees (LANL), William Roybal, Karen Ann Young (LANL/LANSCE), Pamela Gurd, Thomas Hardek (ORNL/ASD)

WPAT062—The Spallation Neutron Source RF Reference System

Maurice Piller, Mark Champion, Mark Crofford, Hengjie Ma (ORNL/SNS), Lawrence Doolittle (LBNL)

WPAT063—Design and Status of the BPM RF Reference Distribution in the SNS

James Pogge, Craig Deibebe, Anthony Webster (ORNL/SNS)

WPAT064—Low Level RF Control System of J-PARC Synchrotrons

Fumihiro Tamura (JAERI/LINAC), Masanobu Yamamoto (JAERI), Masahiro Nomura, Alexander Schnase (JAERI), Shozo Anami, Eizi Ezura, Keigo Hara, Chihiro Ohmori, Akira Takagi, Masahito Yoshii (KEK)

WPAT065—HLS RF System Improvement in NSRL Phase II Project

Kai Jin, Yibin An, Lanlin Feng, Liu Gongfa, Guirong Huang, Guicheng Wang, Xiang Zeng (USTC/NSRL)

WPAT066—ALS Booster Ring RF System Upgrade for Top-Off Mode of Operation

Slawomir Kwiatkowski, Kenneth Michael Baptiste (LBNL/ALS)

WPAT067—High Power Disk Loaded Guide Load

Zoltan David Farkas (SLAC)

WPAT068—Development of Low Level RF Control Systems and their Integration in Booster Synchrotrons and Superconducting Linear Accelerators

Bachtior Aminov, Sergej Kolesov, Helmut Piel, Dorothea Wehler (CRE), Michael Pekeler, Christian Piel, Hanspeter Vogel (ACCEL)

WPAT069—Development of a Solid State RF Amplifier in the kW Regime for Application with Low Beta Superconducting RF Cavities

Christian Piel, Kai Dunkel, Hanspeter Vogel (ACCEL), Bachtior Aminov, Sergej Kolesov, Helmut Piel, Nico Pupeter (CRE)

WPAT070—500 MHz Coaxial Transition Between the ELETTRA Input Coupler and the Transmission Waveguide

Cristina Pasotti, Alessandro Fabris, Michele Svandrlík (ELETTRA)

WPAT071—R&D Status of the 700 MHz, 1MW Klystron for PEFP

Sang-Ho Kim, Bo-hyun Chung, Kie-hyung Chung, Jin-Suk Hong, SeungKook Ko, Kangok Lee, S.J. Noh (KAPRA)

WPAT072—A 1.3GHz Inductive Output Tube for Particle Accelerators

Edward Sobieradzki, Alan Wheelhouse (e2v technologies)

WPAT073—The LCLS LLRF Control System

Karen Dayle Kotturi, Ron Akre (SLAC)

WPAT074—In Depth Diagnostics for RF System Operation in the PEP-II B Factory

Daniel Van Winkle, John Fox, Dmitry Teytelman (SLAC)

WPAT075—Design and Calibration of a Phase and Amplitude Detector

Zheqiao Geng, Pengda Gu, Mi Hou, Guoxi Pei (IHEP Beijing)

WPAT076—Resonant Coupling for RF Sources

Michel Langlois (Thales Broadcast & Multimedia AG)

WPAT077—Finite-Element 2D & 3D PIC Modeling of RF Devices with Applications to Multipacting

John F. DeFord (LLNL), Eric Michael Nelson (LANL), John Petillo (SAIC)

WPAT078—High Frequency Resonant Power Converters for High Power RF Systems

Michael John Bland, Jon Clare, Pat Wheeler, Pericle Zanchetta (University of Nottingham)

WPAT079—Design and Control of a Direct Power Converter for High Power, RF Applications

David Cook, Maurizio Catucci, Jon Clare, Pat Wheeler (University of Nottingham)

WPAT080—Calculation of Beam-Loaded Q in High-Power Klystrons

John F. DeFord (STAR, Inc.), Valentin Ivanov, Kwok Ko (SLAC)

WPAT081—Ceramic Power Extractor Design at a Radio Frequency of 15.6 GHz

Alexei Smirnov, Yan Luo, Rong Yi, David Yu (DULY Research Inc.)

WPAT082—An Improved Pneumatic Frequency

Control for Superconducting Cavities

Gary Zinkann, Sergey I. Sharamentov (ANL)

WPAT083—Steering and Focusing Effects in TESLA

Cavity Due to High Order Mode and Input Couplers

Philippe Regis-Guy Piot (Fermilab), Martin Dohlus,

Klaus Floettmann, Susan Wipf (DESY)

WPAT084—A Ceramic Material for Input Coupler of

Superconducting Cavity

Hiroshi Matsumoto, F. Furuta, Kenji Saito (KEK), K.

Hayashi (TOSHIBA)

WPAT085—Test Results of an SNS Medium Beta

Cryomodule at 4.2 K

Isidoro Enrico Campisi, Fabio Casagrande, Mark Champion, Mark Crofford, Daniel Hatfield, Matthew Howell, Yoon W. Kang, Hengjie Ma, Daniel Stout, William Strong (ORNL/SNS), Pamela Gurd (ORNL/ASD)

WPAT086—Superconducting RF Cavity Frequency

and Field Flatness Sensitivity Simulation Due to

Axial Force

An Sun (ORNL/SNS)

WPAT087—Design of 150 kW CW Power Coupler

for 700 MHz Superconducting Protons Cavities

Mohammed Fouaidy, Sébastien Bousson, Francois

Galet, Hervé Saugnac, Mehdi Souli (IPN), Guillaume

Devanz, Bernard Visentin (CEA/DSM/DAPNIA)

WPAT088—Performance of TESLA Cavities in

Vertical and Horizontal Tests after Fabrication and

Preparation in Industry

Michael Pekeler, Stefan Bauer, Peter vom Stein

(ACCEL), Wolfgang Anders, Jens Knobloch (BESSY

GmbH), Wolf-Dietrich Möller (DESY)

WPAT089—Test Bed for Superconducting Materials

Christopher Dennis Nantista, Valery Dolgashev,

Robert Siemann, Sami G. Tantawi, John Weisend

(SLAC), Isidoro Enrico Campisi (ORNL/SNS)

WPAT091—Fabrication and Final Field Tuning of

Copper Cavity Models for a High-Current SRF ERL

at 703.75 MHz

Michael Cole, Al Burger, Michael Falletta, Douglas

Holmes, Ed Peterson, Robert Wong (AES), Ilan Ben-

Zvi (BNL)

WPAT092—Fabrication Tuning of Four 748.5 MHz

Single Cell SRF Booster Cavities for a 100 mA SRF

FEL Injector

Michael Cole, Ed Peterson, John Rathke (AES)

WPAT093—A Three-Cell Superconducting Deflecting Cavity Design for the ALS at LBNL
Jiaru Shi, Huabi Chen, Shuxin Zheng (TUB), Derun Li (LBNL)

WPAT094—Traveling Wave Accelerating Structure for a Superconducting Accelerator
Alex Kanareykin, Pavel Avrakov (Euclid Concepts, LLC), Nikolay Solyak (Fermilab)

WPAT095—Low-Loss Ferroelectrics for Accelerator Application
Alex Kanareykin, Sergei Fedorovich Karmanenko, Elisaveta Nenasheva (Euclid Concepts, LLC)

**Oral Session WOPA—Special Session: Accelerator Science and Technology Awards, Ballrooms D–G @ 13:00
Chair: N. Phinney (SLAC)**

13:00 WOPA001—Wilson Prize Talk

Keith R. Symon (Univ. of Wisconsin–Madison)

13:20 WOPA002—Ph.D. Dissertation Talk: Experimental Results from the Small Isochronous Ring

Eduard Pozdnyakov (JLab/MSU) Felix Marti, Jose Alberto Rodriguez, Richard York (NSCL)

13:40 IEEE NPSS Particle Accelerator Science and Technology Award

Ronald Davidson (Plasma Physics Laboratory, Princeton University)

13:55 IEEE NPSS Particle Accelerator Science and Technology Award

Thomas Roser (BNL)

14:10 U.S. Particle Accelerator School Prize for Achievement in Accelerator Physics and Technology

Wim Leemans (LBNL)

14:25 U.S. Particle Accelerator School Prize for Achievement in Accelerator Physics and Technology

Anton Piwinski (DESY)

14:40 Newly Elected Fellows of the APS/DPB

14:55 Student Travel Awards

**Oral Session WOPB—Special Session: Einstein and the World
Year of Physics, Ballrooms D–G @ 15:00
Chair: W. Madia (Battelle)**

15:00 Introduction: Einstein's Legacy in Charged Particle Acceleration
S. Chattopadhyay (JLab)

15:15 WOPB001—Einstein and Cosmic Acceleration
Michael Turner (NSF)

15:55 WOPB002—Symmetries and Einstein
Makoto Kobayashi (KEK)

16:35 WOPB003—Neutrinos and Einstein
Yoichiro Suzuki (Univ. of Tokyo)

17:15 WOPB004—The Quest for Dark Matter
Carlo Rubbia (CERN)

Oral Session ROAA—Lepton Accelerators and Colliders
Ballroom A @ 8:30
Chair: K. Oide (KEK)

8:30 ROAA001—DAFNE Operation and Plans for DAFNE2

Mikhail Zobov, David Alesini, Gabriele Benedetti, Maria Biagini, Caterina Biscari, Roberto Boni, Manuela Boscolo, Alberto Clozza, Giovanni Delle Monache, Giampiero Di Pirro, Alessandro Drago, Alessandro Gallo, Andrea Ghigo, Susanna Guiducci, Maurizio Incurvati, Carlo Ligi, Fabio Marcellini, Giovanni Mazzitelli, Catia Milardi, Luigi Pellegrino, Miro Preger, Pantaleo Raimondi, Ruggero Ricci, Claudio Sanelli, Mario Serio, Francesco Sgamma, Bruno Spataro, Alessandro Stecchi, Angelo Stella, Cristina Vaccarezza, Mario Vescovi (INFN/LNF)

8:55 ROAA002—CESR-c: Performance of a Wiggler-Dominated Storage Ring
Alexander Temnykh (Cornell Univ.)

9:20 ROAA003—Proposal for an Experiment on Bunch Length Modulation in DAFNE

Caterina Biscari, David Alesini, Gabriele Benedetti, Maria Biagini, Roberto Boni, Manuela Boscolo, Alberto Clozza, Giovanni Delle Monache, Giampiero Di Pirro, Alessandro Drago, Alessandro Gallo, Andrea Ghigo, Susanna Guiducci, Maurizio Incurvati, Carlo Ligi, Fabio Marcellini, Giovanni Mazzitelli, Catia Milardi, Luigi Pellegrino, Miro Preger, Pantaleo Raimondi, Ruggero Ricci, Claudio Sanelli, Mario Serio, Francesco Sgamma, Bruno Spataro, Alessandro Stecchi, Angelo Stella, Cristina Vaccarezza, Mario Vescovi, Mikhail Zobov (INFN/LNF)

9:35 ROAA004—MICE: The International Muon Ionisation Cooling Experiment

Paul Drumm (CCLRC/RAL), Malcolm Ellis (Imperial College of Science and Technology)

9:50 ROAA005—Recent Innovations in Muon Beam Cooling and Prospects for Muon Colliders

Rolland Johnson, Mohammad Alsharo'a, Pierrick M. Hanlet, Robert Hartline, Moyses Kuchnir, Kevin Paul, Thomas Roberts (Muons, Inc), Charles Ankenbrandt, Emanuela Barzi, Ivan Gonin, Alfred Moretti, David Neuffer, Milorad Popovic, Gennady Romanov, Daniele Turrioni, Victor Yarba (Fermilab), Daniel Kaplan, Katsuya Yonehara (Illinois Institute of Technology), Kevin Beard, S. Alex Bogacz, Yaroslav Derbenev (Jefferson Lab)

Oral Session ROAB—Pulsed-Power and High-Intensity Beams
Ballroom B @ 8:30
Chair: E. Hartouni (LLNL)

8:30 ROAB001—DARHT-II Long-Pulse Beam-Dynamics Experiments
Carl Ekdahl (LANL)

8:55 ROAB002—Advances of Transmission Line Kicker Magnets
Laurent Ducimetière (CERN)

9:20 ROAB003—Highly Compressed Ion Beams for High Energy Density Science
Alex Friedman, John J. Barnard, Debra Callahan, George Caporaso, David Grote, Richard Lee, Scott D. Nelson, Max Tabak (LLNL), David Rose, Carsten Hilmar Thoma, Dale Welch (ATK-MR), C. M. Celata, Andy Faltens, Enrique Henestroza, Edward Lee, Matthaeus Leitner, B. Grant Logan, Lou Reginato, Andrew Sessler, John William Staples, William Waldron, Jonathan Wurtele, Simon Yu (LBNL), Ronald Davidson, Larry Grisham, Igor Kaganovich (PPPL), Richard J. Briggs (SAIC), Craig Olson, Tim Renk (Sandia National Laboratories)

9:45 ROAB004—Ion Effects in the DARHT-II Downstream Transport
Kwok-Chi Dominic Chan, Harold Davis, Carl Ekdahl (LANL), Thomas C. Genoni, Thomas P. Hughes (ATK-MR), Martin E. Schulze (GA)

10:00 ROAB005—Helical Pulseline Structures for Ion Acceleration
Richard J. Briggs (SAIC), Lou Reginato, William Waldron (LBNL)

Oral Session ROAC—Radio-Frequency Systems
Ballroom C @ 8:30
Chair: S. Tantawi (SLAC)

8:30 ROAC001—Testing of the SNS Superconducting Cavities and Cryomodules
Isidoro Enrico Campisi (ORNL/SNS)

8:55 ROAC002—Overview of LLRF Systems
Matthias Liepe (Cornell Univ.)

9:20 ROAC003—Superconducting RF for Low-Velocity and Intermediate-Velocity Beams
Terry L. Grimm, Walter Hartung (NSCL)

9:45 ROAC004—High Gradient Performance of Prototype NLC/GLC X-Band Accelerator Structures
Chris Adolphsen, Gordon B. Bowden, David Burke, Jose Chan, John Cornuelle, Steffen Doeberl, Valery Dolgashev, Josef Frisch, R. Keith Jobe, Roger Michael Jones, Robert Kirby, Frederic Le Pimpec, James R. Lewandowski, Zenghai Li, Roger Heering Miller, Christopher Dennis Nantista, Janice Nelson, Marc Ross, Ronald Ruth, David Schultz, Tonee Smith, Sami G. Tantawi, Juwen W. Wang (SLAC), Tug Tacku Arkan, Cristian Boffo, Harry Carter, David Finley, Ivan Gonin, Timergali N. Khabibouline, Shekhar Mishra, Gennady Romanov, Nikolay Solyak (Fermilab), Yasuo Higashi, Toshiyasu Higo, Nobu Toge (KEK)

10:00 ROAC005—Present Status of J-PARC Ring RF Systems
Masahito Yoshii, Shozo Anami, Eizi Ezura, Keigo Hara, Yoshinori Hashimoto, Chihiro Ohmori, Akira Takagi, Makoto Toda (KEK), Masahiro Nomura, Alexander Schnase, Fumihiko Tamura, Masanobu Yamamoto (JAERI)

Oral Session ROAB (Cont.)—Pulsed-Power and High-Intensity Beams, Ballroom B @ 10:40
Chair: K.-C. Chan (LANL)

10:40 ROAB006—Pulsed Power Drivers and Diodes for X-Ray Radiography
Kenneth John Thomas (AWE)

11:05 ROAB007—Pulsed Power Applications in High Intensity Proton Rings
Wu Zhang, Jon Sandberg (BNL), Tony Fowler (CERN), Tadamichi Kawakubo (KEK), Roy I. Cutler (ORNL/SNS)

11:30 ROAB008—Solid-State Modulators for RF and Fast Kickers
Edward Cook, Guy L. Akana, EDWARD J. Gower, Steven Hawkins, Bradley C. Hickman (LLNL), Craig A. Brooksby (Bechtel Nevada), Richard Cassel, Jeffrey E. De Lamare, Minh N. Nguyen, Chris Pappas (SLAC)

11:55 ROAB009—NuMI Proton Kicker Extraction System
Chris C. Jensen, George E. Krafczyk (FNAL)

12:10 ROAB010—Development of a Compact Radiography Accelerator Using Dielectric Wall Accelerator Technology
Stephen Sampayan, George Caporaso, Yu-Jiuan Chen, Steven Hawkins, Clifford Holmes, James F. McCarrick, Scott D. Nelson, William Nunnally, Mark Rhodes, David Sanders, James Sullivan, James Watson (LLNL)

Oral Session ROAC (Cont.)—Radio-Frequency Systems

Ballroom C @ 10:40

Chair: M. Lynch (LANL)

10:40 ROAC006—W-Band Source Development at Los Alamos

Bruce Carlsten, Lawrence M. Earley, Patrick Ferguson, Frank L. Krawczyk, James Potter, Steven Russell, Zhi-Fu Wang (LANL), Stanley Humphries (Field Precision)

11:05 ROAC007—RF Breakdown in Normal Conducting Single-Cell Structures

Valery Dolgashev, Christopher Dennis Nantista, Sami G. Tantawi (SLAC), Yasuo Higashi, Toshiyasu Higo (KEK)

11:30 ROAC008—Atom Probe Tomography Studies of RF Materials

Jim Norem (ANL), Pierre Bauer (Fermilab), Jason Sebastian, David N. Seidman (NU)

11:45 ROAC009—World Record Accelerating Gradient Achieved in a Superconducting Niobium RF Cavity

Rong-Li Geng, Hasan Padamsee, Andrew Seaman, Valery D. Shemelin (Cornell University)

12:00 ROAC010—Development of an Ultrafast Silicon Switch for an Active X-Band High Power RF Compression System

Jiquan Guo, Sami G. Tantawi (SLAC)

Oral Session ROAD—Accelerator Technology
Ballroom A @ 10:40
Chair: M. Peiniger (ACCEL)

10:40 ROAD001—Recent Progress in Power Refrigeration Below 2 K for Superconducting Accelerators

Serge Claudet (CERN)

11:05 ROAD002—Remote Handling in High-Power Proton Facilities

Graeme R. Murdoch (ORNL/SNS)

11:30 ROAD003—Post-Irradiation Properties of Candidate Materials for High-Power Targets

Harold G Kirk, Leonard Mausner, Nikolaos Simos, Peter Thieberger (BNL), Yoshinari Hayato, Koji Yoshimura (KEK), Kirk T. McDonald (PU), John Sheppard (SLAC)

11:45 ROAD004—TBD

12:00 ROAD005—Status of NEG Coating at ESRF

Michael Hahn, Daniela Schmied (ESRF), Roberto Kersevan [on leave], Roberto Kersevan (ESRF; ORNL/SNS)

Poster Session RPAE—Light Sources and Free-Electron Lasers
Ballroom E, 8:30-12:20

RPAE001—On the Issue of Phasing of Undulators at the Advanced Photon Source

Roger J. Dejus (ANL)

RPAE002—Coupling Correction of a Circularly Polarizing Undulator

Louis Emery (ANL)

RPAE003—Optimization and Modeling Studies for Obtaining High Injection Efficiency at the Advanced Photon Source

Louis Emery (ANL)

RPAE004—Parametric Mechanical Design of New Insertion Devices at the APS

John H. Grimmer, Ronald Kmok (ANL)

RPAE005—The possibility for a Cryogenic Short-Period Staggered Undulator
Shigemi Sasaki (ANL)

RPAE006—Feasibility Study on Introducing a Superconducting Wiggler to Saga Light Source
Shigeru Koda, Yositaka Iwasaki, Toshihiro Okajima, Hiroyuki Setoyama, Yuichi Takabayashi, Takio Tomimasu, Katuhide Yoshida (Saga Synchrotron Light Source), Hideaki Ohgaki (Kyoto IAE), Masami Torikoshi (NIRS)

RPAE007—In-Vacuum and Quasi-Periodic Undulators at Danfysik A/S
Franz Bødker, Henning Bach, Erik Busk Christensen, Erik Juul, Michael Pedersen, Torben Leif Svendsen (Danfysik A/S)

RPAE008—Study of Magnetic Field Errors Induced by Typical Manufacturing Errors in Superconducting Miniundulators
Caozheng Diao, Herbert Oskar Moser (SSLS)

RPAE009—Design Considerations for the Stability Improvement of Klystron-Modulator for PAL XFEL
Jong-Seok Oh, Yeung-Jin Han, In Soo Ko, Won Namkung, Soung Soo Park (PAL)

RPAE010—Simulation of the Synchrotron Kinetics in Compton X-Ray Sources
Eugene Victor Bulyak, Peter Gladkikh, Vladislav Skomorokhov (NSC/KIPT)

RPAE011—Design and Construction of NESTOR X-Ray Source Injection System
Andrey Yurij Zelinsky, Mykola Ivanovich Ayzatskiy, Anatoly Nikolayevich Dovbnya, Ivan Karnaukhov, Volodymyr Kushnir, Andrey Mytsykov, Alexander Shcherbakov (NSC/KIPT)

RPAE012—Shielding Design Study for X-Ray Generator NESTOR
Andrey Yurij Zelinsky, Anatoly Nikolayevich Dovbnya, Ivan Karnaukhov, Alexander Mazilov, Fedor Peev, Georgij Pugachev, Andrey Razuksanov, Alexander Shcherbakov (NSC/KIPT)

RPAE013—Laser System for Photoelectron and X-Ray Production in the PLEIADES Compton Light Source
David Jeremy Gibson, C. Barty, S. Betts, John Crane, Igor Jovanovic (LLNL)

RPAE014—High-Energy Compton Scattering Light Sources
Fred V. Hartemann, Scott Anderson, C. Barty, John Crane, David Jeremy Gibson, Aaron Matthew Tremaine, E. P. Hartouni (LLNL)

RPAE015—High Energy, High Brightness X-Rays
Produced by Compton Back Scattering at the
Livermore PLEIADES facility

*Aaron Matthew Tremaine, Scott Anderson, S. Betts,
John Crane, David Jeremy Gibson, Fred V.
Hartemann, Jeremy Scott Jacob (LLNL), Pedro
Frigola, Jae Lim, James Rosenzweig, Gil Travish
(UCLA)*

RPAE016—Smith-Purcell Radiation from a Charge
Moving Above a Finite-Length Grating

*Amit S. Kesar, Stephen Korbley, Richard J. Temkin
(MIT/PSFC,), Mark Hess (IUCF, Bloomington)*

RPAE017—Radially Polarized Ion Channel Laser
Robert Arthur Bosch (UW-Madison/SRC)

RPAE018—Calculation of Reflection Matrix
Elements of a Grating for Growing Evanescent
Waves

Vinit Kumar, Kwang-Je Kim (ANL)

RPAE019—Positron Source from Betatron X-Rays
Radiated in a Plasma Wiggler

*Devon K. Johnson, Chris Clayton, Chengkun Huang,
Chan Joshi, Wei Lu, Kenneth Marsh, Warren Mori,
Miaomiao Zhou (UCLA), Christopher Barnes, Franz-
Josef Decker, Mark Hogan, Richard Iverson, Patrick
Krejcik, Caolionn O'Connell, Robert Siemann,
Dieter Walz (SLAC), Suzhi Deng, Tom Katsouleas,
Patric Muggli, Erdem Oz (USC)*

RPAE020—Production of High Harmonic X-Ray
Radiation from Nonlinear Inverse Compton Scat-
tering at LLNL PLEIADES

*Jae Lim, James Rosenzweig (UCLA), Scott Anderson,
Shawn Betts, John Crane, David Jeremy Gibson,
Fred V. Hartemann, Aaron Matthew Tremaine
(LLNL)*

RPAE021—Feasibility Study of a Laser Beat-Wave
Seeded THz FEL at the Neptune Laboratory

*Sven Reiche, Chan Joshi, Claudio Pellegrini, James
Rosenzweig, Sergei Tochitsky (UCLA), Gennady
Shvets (The University of Texas at Austin)*

RPAE022—Improved Long Radius of Curvature
Measurement System for FEL Mirrors

Jingyi Li, Changchun Sun, Y. K. Wu (DU/FEL)

RPAE023—Development of a Low-Cost Beam
Profile Monitor System at Duke FEL Storage Ring
Jingyi Li, Y. K. Wu (DU/FEL)

RPAE027—Linear Optics Measurements in the
ESRF Booster

*Yannis Papaphilippou, Laurent Farvacque, Annalisa
Patriarca, Eric Plouviez (ESRF)*

RPAE028—Lattice Upgrade Options for the ESRF Storage Ring

Yannis Papaphilippou, Pascal Elleaume, Laurent Farvacque, Annick Ropert (ESRF)

RPAE029—Analytical Considerations for the Reduction of the Effective Emittance with Variable Dipole Field Strengths

Yannis Papaphilippou, Pascal Elleaume (ESRF)

RPAE030—Commissioning of the SOLEIL Booster

Alexandre Loulergue (SOLEIL)

RPAE031—SOLEIL Status Report

Jean-Marc Filhol, Jean Claude Besson, Pascale Brunelle, Roger Chaput, Antoine Dael, Jean-Claude Denard, Jean-Marie Godefroy, Christian Herbeaux, Alain Lestrade, Marie-Paule Level, Alexandre Loulergue, Patrick Marchand, Jean-Louis Marlats, Amor Nadji, Laurent Stanislas Nadolski, Ryutaro Nagaoka, Marie-Agnès Tordeux (SOLEIL)

RPAE032—Femtosecond Laser-Electron Interaction

in a Storage Ring Studied by Terahertz Radiation

Karsten Holldack, Shaukat Khan, Rolf Mitzner, Torsten Quast (BESSY GmbH)

RPAE033—Commissioning Results from the BESSY II Femtoslicing X-Ray Source

Shaukat Khan, Karsten Holldack, Torsten Kachel, Torsten Quast (BESSY GmbH), Rolf Mitzner (Universitaet Muenster)

RPAE034—Storage Ring Fill Patterns for Femtoslicing Applications

Shaukat Khan (BESSY GmbH)

RPAE035—Orbit Stability at BESSY

Roland Müller, Joerg Feikes, Karsten Holldack, Peter Kuske (BESSY GmbH)

RPAE036—Damping Wigglers for the PETRA III Light Source

Markus Tischer, Klaus Balewski, Winfried Decking, Mike Seidel, Li Yongjun (DESY), Victor Kuzminykh, Evgeny Levichev, Pavel Vobly, Konstantin Zolotariov (BINP SB RAS)

RPAE037—Operation of ANKA with Low Emittance Optics

Erhard Hettel, Asem Ben Kalefa, Ingrid Birkel, Anke-Susanne Müller, Paweł Wesołowski (FZK-ISS-ANKA), Francisco Pérez, Montserrat Pont (CELLS), Massimo Giovannozzi (CERN)

RPAE038—Far Infrared Coherent Synchrotron Edge Radiation at ANKA

Anke-Susanne Müller, Ingrid Birkel, Biliana

Gasharova, Erhard Huttel, Richard Kubat, Yves-Laurent Mathis, Wolfgang Mexner, David A. Moss, Robert Rossmanith, Paweł Wesolowski, Michael Wuensch (FZK-ISS-ANKA), Francisco Pérez, Montserrat Pont (FZK-ISS-ANKA; CELLS), Carol J. Hirschmugl (UWM)

RPAE039—Operation of the ANKA Synchrotron Light Source with Superconductive Undulators
Robert Rossmanith, Axel Bernhard, Michael Hagelstein, Barbara Kostka, Anke-Susanne Müller, Matthias Weisser (FZK-ISS-ANKA), Erhard Steffens (Erlangen University), Tilo Baumbach, Theo Schneider (FZ Karlsruhe)

RPAE040—COD Correction at the PF and PF-AR by New Orbit Feedback Scheme
Kentaro Harada (KEK), Norio Nakamura, Hiroshi Sakai, Hiroyuki Takaki (ISSP/SRL)

RPAE041—Reconstruction of Photon Factory Storage Ring for the Straight-Sections Upgrade Project

Tohru Honda, Seiji Asaoka, Kaiichi Haga, Kentaro Harada, Yoichiro Hori, Masaaki Izawa, Toshio Kasuga, Yukinori Kobayashi, Hideki Maezawa, Atsushi Mishina, Toshiyuki Mitsuhashi, Tsukasa Miyajima, Hiroshi Miyauchi, Shinya Nagahashi, Takashi Nogami, Takashi Obina, Cheol-on Pak, Shogo Sakanaka, Yoshihiro Sato, Tatsuro Shioya, Mikito Tadano, Takeshi Takahashi, Yasunori Tanimoto, Kimichika Tsuchiya, Takashi Uchiyama, Akira Ueda, Kensei Umemori, Shigeru Yamamoto (KEK)

RPAE042—Optimization of Kicker Pulse Bump by Using a SR Monitor at the Photon Factory
Toshiyuki Mitsuhashi, Akira Ueda (KEK)

RPAE043—Beam Position Monitor for Undulator by Using SR Monitor Technique
Toshiyuki Mitsuhashi, Mikio Tadano (KEK)

RPAE044—Operation and Recent Developments of Photon Factory Advanced Ring
Tsukasa Miyajima (KEK)

RPAE045—Production of Short Electron Bunches by Adiabatic Excitation of Bunch Shape Oscillations
Shogo Sakanaka, Toshiyuki Mitsuhashi, Takashi Obina, Kensei Umemori (KEK)

RPAE046—Operational Status at the PLS: Recent Improvements and Changes
Eung Soo Park, Jinhyuk Choi, Heung-Sik Kang, Mungyung Kim, Eun-Hee Lee, Tae-Yeon Lee (PAL)

RPAE047—Lattice Study for the Taiwan Photon Source

Chin-Cheng Kuo, Ho-Ping Chang, Chien-Te Chen, Gwo-Huei Luo, Hung-Jen Tsai, Min-Huey Wang (NSRRC)

RPAE048—Design Consideration of a Booster for Taiwan Photon Source

Gwo-Huei Luo, Ho-Ping Chang, Chin-Cheng Kuo, Ke-Kang Lin, Hung-Jen Tsai (NSRRC)

RPAE049—Revision of Booster to Storage Ring Transport Line Design for Top-Up Operation at NSRRC

Min-Huey Wang, Ho-Ping Chang, Jenny Chen, June-Rong Chen, Kuo-Tung Hsu, Chin-Cheng Kuo, Gwo-Huei Luo (NSRRC)

RPAE050—Status of the CAMD Light Source

Victor Paul Suller (CCLRC/DL/ASTeC), Evan Anzalone, Mikhail Fedurin, Paul Jines, Darren Launey, Toby Miller, Yanshan Wang (LSU/CAMD)

RPAE051—Multipole Design for CAMD Storage Ring

Victor Paul Suller (CCLRC/DL/ASTeC), Mikhail Fedurin, Paul Jines, Toby Miller (LSU/CAMD)

RPAE052—Accelerator Physics Studies and Commissioning Plans for the Diamond Light Source

Riccardo Bartolini, Mahdia Belgrave, Chris Christou, Vince Kempson, Ian Martin, James Henry Rowland, Beni Singh, Richard Walker (Diamond), David James Holder, James Jones, Susan Louise Smith, Jennifer Anne Varley, Naomi Wyles (CCLRC/DL/ASTeC)

RPAE053—Transient Generation of Short Pulses in the APS Storage Ring

Glenn Decker, Nicholas Sereno (ANL)

RPAE054—Beam Stability at the Advanced Photon Source

Glenn Decker, Om Singh (ANL)

RPAE055—Results of Preliminary Tests of PAR Bunch Cleaning

Chihyuan Yao, Michael Borland, Arthur Grellick, Alex Lumpkin, Nicholas Sereno (ANL)

RPAE056—NSLS II: The Future of the NSLS

James Murphy (BNL), Johan Bengtsson, Richard Biscardi, Alexei Blednykh, Larry Carr, William Casey, Shaileendra Chouhan, Steven Dierker, Edwin Haas, Richard Heese, Steve Hulbert, Erik David Johnson, Chi-Chang Kao, Stephen L. Kramer, Samuel Krinsky, Igor Pinayev, Slobodan Pjerov, Boris Podobedov, George Rakowsky, James Rose,

Timur Shaftan, Brian Sheehy, John Skaritka, Nathan Towne, Jiunn-Ming Wang, Xijie Wang, Li-Hua Yu (BNL/NSLS)

RPAE057—Dynamic Aperture Optimization for Low Emittance Light Sources

Stephen L. Kramer, Johan Bengtsson (BNL/NSLS)

RPAE058—NSLS-II Injection Concept

Timur Shaftan, Johan Bengtsson, Alexei Blednykh, Shailendra Chouhan, Erik David Johnson, Stephen L. Kramer, Samuel Krinsky, James Murphy, Igor Pinayev, Slobodan Pjerov, Boris Podobedov, George Rakowsky, James Rose, Toshiya Tanabe, Jiunn-Ming Wang, Xijie Wang, Li-Hua Yu (BNL/NSLS)

RPAE059—Design of 3 GeV Booster for NSLS-II

Timur Shaftan, Erik David Johnson, James Murphy, Igor Pinayev, James Rose, Xijie Wang (BNL/NSLS)

RPAE060—Simulation and Automation of the EEBI Test at ALS

Hiroshi Nishimura, Warren Byrne (LBNL)

RPAE061—Beam Loss Simulation Studies for ALS Top-Off Operation

Hiroshi Nishimura, David Robin, Christoph Steier (LBNL)

RPAE062—Estimation of the Effective Magnet

Misalignments of the ALS Storage Ring

Hiroshi Nishimura, Tom Scarvie (LBNL)

RPAE063—Status and Plans for the ALS Top-Off Upgrade

David Robin, Barry Bailey, Kenneth Michael Baptiste, Walter Barry, Alan Biocca, Warren Byrne, Richard Donahue, Robert M. Duarte, Michael Fahmie, William Gath, James Julian, Jin-Young Jung, Slawomir Kwiatkowski, Robert Mueller, Hiroshi Nishimura, Jim Oneill, Soren Prestemon, Steven Rossi, Fernando Sannibale, Ross Schlueter, Derek Shuman, Christoph Steier, Gregory D. Stover, Chris Timossi, Tony Warwick (LBNL)

RPAE064—Radiation Safety Studies for Top-Off Operation of the Advanced Light Source

David Robin, Richard Donahue, Robert Mueller, Hiroshi Nishimura, Christoph Steier (LBNL)

RPAE065—Generation of Picosecond X-Ray Pulses in the ALS Using RF Orbit Deflection

David Robin, John Byrd, Slawomir Kwiatkowski, Derun Li, Fernando Sannibale, Christoph Steier, Weishi Wan, Alexander Zholents (LBNL)

RPAE066—Terahertz Coherent Synchrotron Radiation from Femtosecond Laser Modulation of the

Electron Beam at the Advanced Light Source

John Byrd, Zhao Hao, Michael C. Martin, David Robin, Fernando Sannibale, Robert W. Schoenlein, Alexander Zholents, Max Zolotorev (LBNL)

RPAE067—Investigations, Experiments, and

Implications for Using Existing Pulse Magnets for “Topoff” Operation at the Advanced Light Source
Gregory D. Stover, Kenneth Michael Baptiste, Walter Barry, William Gath, James Julian, Slawomir Kwiatkowski, Soren Prestemon, Ross Schlueter, Derek Shuman, Christoph Steier (LBNL)

RPAE068—The Ultra-Short Bunches in MIT SHR Storage Ring with Very Small Momentum Compactions

Dong Wang (MIT)

RPAE069—Terahertz Coherent Synchrotron Radiation in the MIT-Bates South Hall Ring

Fuhua Wang, Dan Cheever, Manouchehr Farkhondeh, Wilbur Franklin, William Graves, Ernie Ihloff, Richard Milner, Chris Tschalaer, Jan Van der Laan, Defa Wang, Dong Wang, Townsend Zwart (MIT), Larry Carr, Boris Podobedov (BNL/NSLS), Fernando Sannibale (LBNL)

RPAE070—Recent Developments at Aladdin

Ken Jacobs, Joseph Bisognano, Robert Arthur Bosch, David Eisert, Michael Fisher, Michael Green, Richard Keil, Kevin J Kleman, Robert Legg, Greg Rogers, John Stott (UW-Madison/SRC)

RPAE071—Touschek Lifetime and Undulator Damage in the Advanced Photon Source

Michael Borland, Louis Emery (ANL)

RPAE072—Simulations of X-Ray Slicing and Compression Using Crab Cavities in the Advanced Photon Source

Michael Borland (ANL)

RPAE073—A Novel Method To Generate Picosecond X-Ray Pulses in Storage Ring Light Sources

Weiming Guo, Michael Borland, Katherine C. Harkay, Vadim Sajaev, Bingxin Yang (ANL)

RPAE074—Re-Commissioning of the Duke Storage Ring with a HOM-Damped RF Cavity and a New Straight Section Lattice for FELs

Y. K. Wu, Matthew D. Busch, Mark Emamian, Joe Faircloth, J. Gustavsson, Steven M. Hartman, C. Howell, M. Johnson, Jingyi Li, Stepan Mikhailov, Owen Oakeley, J. Patterson, Maurice Pentico, Victor Popov, V. Rathbone, Gary Swift, Patrick Walter Wallace, Ping Wang (DÜ/FEL), Vladimir Sergeevich Arbuzov, Yuri Evtushenko, Nikolai Gavrilov, Igor Gornakov, I. Ivantcov, Igor Kuptcov, Grigory

*Yakovlevich Kurkin, Natalya Mityanina, A. M.
Pavlenok, Victor Petrov, Igor Sedlyarov, Alexey G.
Tribendis (BINP SB RAS)*

RPAE075—Status of Duke Storage Ring Light Sources
Y. K. Wu (DU/FEL)

RPAE076—The Commission of Hefei Light Source After Reconstruction
*Hongliang Xu, Duohui He, Weimin Li, Zuping Liu,
Baogen Sun, Lin Wang (USTC/NSRL)*

RPAE077—A New Low Emittance Operation Mode with Insertion Devices in HLS Storage Ring
He Zhang, Lin Wang (USTC/NSRL), Yongjun Li (DESY)

RPAE078—Commissioning of SAGA Light Source
*Takio Tomimasu, Shigeru Koda, Yuichi Takabayashi,
Katuhide Yoshida (Saga Synchrotron Light Source),
Hiroyuki Toyokawa (AIST), Hideaki Ohgaki (Kyoto
IAE), Yoshitaka Iwasaki (SAGA)*

RPAE079—Flexible Bunch Frequency for Synchrotron Light Sources
*Gregory James Portmann, Slawomir Kwiatkowski,
David Robin (LBNL/ALS), Walter Barry (LBNL)*

RPAE080—Diagnostics Plan for the Advanced Light Source Top-Off Upgrade
*Tom Scarvie (LBNL/ALS), Walter Barry, Warren
Byrne, Michael Chin, Robert M. Duarte, Jim O'Neill,
Fernando Sannibale, Chris Timossi (LBNL)*

RPAE082—The New Undulator Based fs-Slicing Beamline at the ALS
*Christoph Steier, Alexander Zholents (LBNL/AFR),
David Robin, Weishi Wan, Walter Wittmer (LBNL/
ALS)*

RPAE083—An Overview of the CANDLE Synchrotron Light Facility Project in Armenia
*Vasili Mkrtich Tsakanov, Mher Aghasyan, Gayane A.
Amatuni, Vardan Avagyan, Arshak Grigoryan, Bagrat
Grigoryan, Michael Ivanyan, Vahram Jalalyan, Davit
Kalantar Kalantaryan, Vitali Khachatrian, Edouard
Laziev, Yuri Lawrent Martirosyan, Raphael
Mikaelyan, Sergey Minasyan, Khnkanos N.
Sanosyan, Stepan Tatikian, Sergey Tunyan, Ashot
Vardanyan (CANDLE)*

RPAE084—Beam Dynamics Aspects of the ASP Booster
Soren Friis-Nielsen (Danfysik A/S)

RPAE085—ELETTRA Present and Future Upgrades
Carlo Joseph Bocchetta, Daniele Bulfone, Gerardo

*D'Auria, Giovanni De Ninno, Bruno Diviacco,
Alessandro Fabris, Riccardo Fabris, Mario Ferianis,
Alessandro Gambitta, Fatma Iazzourene, Emanuel
Karantzoulis, Marco Lonza, Fabio Mazzolini,
Michele Svandrlík, Lidia Tosi, Alessio Turchet,
Roberto Visintini, Dino Zangrandi (ELETTRA)*

RPAE086—Observation of Coherent Synchrotron
Radiation at NewSUBARU
Yoshihiko Shoji (LASTI)

RPAE087—Progress of the Synchrotron Light
Source ALBA

*Dieter Einfeld, Josep Campmany, Marc Muñoz,
Francisco Pérez, Montserrat Pont (CELLS)*

**Poster Session RPAP—Application of Accelerators &
Instrumentation
Park Concourse 8:30-12:20**

RPAP001—First Performance Check of the Heidelberg Medicine RFQ-Drifttube-Combination
*Alexander Bechtold, Manuela Otto, Ulrich Ratzinger,
Alwin Schempp (IAP), Hartmut Eickhoff, Bernhard
Schlitt (GSI)*

RPAP002—A CW RFQ Accelerator for Deuterons
*Philipp Fischer, Alwin Schempp (IAP), Juergen
Haeuser (NTG Neue Technologien GmbH & Co KG)*

RPAP003—Conceptual Design of a 352 MHZ-
Proton-RFQ for GSI
Benjamin Hofmann, Alwin Schempp (IAP)

RPAP004—Simulations for the Frankfurt Funneling
Experiment
Jan Thibus, Alwin Schempp (IAP)

RPAP005—The Accelerator and Beam Transport
Line Preliminary Design for TRADE Experiment
*Luigi Picardi, Cesidio Cianfarani, Marco Ciotti,
Mario Mezzacappa, Gian Luca Orlandi, Concetta
Ronsivalle (ENEA C.R. Frascati), Stefano Monti,
Francesco Troiani (ENEA C.R. Rome)*

RPAP006—X-Band Linac Beam-Line for Medical
Compton Scattering X-Ray Source
*Katsuhiro Dobashi (NIRS), Mitsuo Akemoto, Hitoshi
Hayano, Toshiyasu Higo, Junji Urakawa (KEK),
Futaro Ebina, Atsushi Fukasawa, Tatsuo Kaneyasu,
Haruyuki Ogino, Fumito Sakamoto, Mitsuru Uesaka,
Tomohiko Yamamoto (UTNL)*

RPAP007—Alternating-Phase-Focused Linac with Interdigital H-Mode Structure for Medical Injectors
Yoshiyuki Iwata, Takashi Fujisawa, Takuji Furukawa, Satoru Hojo, T. Honma, Mitsutaka Kanazawa, Nobuyuki Miyahara, Takeshi Murakami, Masayuki Muramatsu, Koji Noda, Hirotsugu Ogawa, Masami Torikoshi, Satoru Yamada (NIRS), Tetsuya Fujimoto, Hiroyuki Ogawa (AEC), Valery Kapin (MEPhI), Yusuke Fujii, Toshinori Mitsumoto, Hiroshi Tsutsui (SHI)

RPAP008—The CBS: The Most Cost Effective and High Performance Carbon Beam Source Dedicated to a New Generation of Cancer Therapy Beams
Masayuki Kumada (NIRS), Vasily Parkhomchuk (BINP SB RAS)

RPAP009—Present Status of HIMAC and Carbon Ion Therapy
Eiichi Takada (NIRS)

RPAP010—Development of Femtosecond and Atosecond Pulse Radiolysis by Using Laser Photocathode RF Gun S-Band Electron Linac
Yoichi Yoshida (RCNP)

RPAP011—Technical Development of Profile Measurement for the Soft X-Ray Via Compton Backward Scattering
Taku Saito, Yoshimasa Hama, Kentaro Hidume, Ryunosuke Kuroda, Shuichi Minamiguchi, Akihiro Ōshima, Daisuke Ueyama, Masakazu Washio (RISE), Shigeru Kashiwagi (ISIR), Hitoshi Hayano, Junji Urakawa (KEK)

RPAP012—Dual Energy X-Ray CT by Compton Scattering Hard X-Ray Source
Mitsuru Uesaka, Tatsuo Kaneyasu (UTNL), Katsuhiro Dobashi, Masami Torikoshi (NIRS)

RPAP013—Characteristic Experimentations of Degrader and Scatterer at MC-50 Cyclotron
Seok-Ki Lee, Byung-Ho Choi, Kye-Ryung Kim, Hwa-Ryun Lee, Bum-Sik Park (KAERI)

RPAP014—Uniform Irradiation Systems Using a Rotatable Stage for Test Facilities of PEFP
Bum-Sik Park, Byung-Ho Choi, Kye-Ryung Kim, Seok-Ki Lee (KAERI)

RPAP015—Modeling of Internal Injection and Beam Dynamics for High Power RF Accelerator
Michael A. Tiunov, Vadim Auslender, Marlen Karliner, Gennady Ivanovich Kuznetsov, Ivan Makarov, Alexander Panfilov, Vladimir V. Tarnetsky (BINP SB RAS)

RPAP016—High Power Electron Accelerator ILU-12
Vadim Tkachenko, Vadim Auslender, Vladimir Cheskidov, Gennady Ivanovich Kuznetsov, Ivan Makarov, Gennady Ostreiko, Alexander Panfilov, Alexey Sidorov, Vladimir V. Tarnetsky, Michael A. Tiunov (BINP SB RAS)

RPAP017—Industrial Electron Accelerators Type ILU
Vadim Auslender, Alex Bryazgin, Boris Faktorovich, V.E. Nekhaev, Alexander Panfilov, Vadim Tkachenko, Alfred Tuvik, Gorbunov Valentin, Leonid Voronin (BINP SB RAS)

RPAP018—Identification of Nano-Objects in Substances by Using of X-Ray Electron Radiation
Vladislav Konstantin Grishin (MSU)

RPAP019—Further Development of Irradiation Field Forming Systems of Industrial Electron Accelerators
Nickolai Georgievich Tolstun, Andrey Ivanov, Valery Pavlovich Ovchinnikov, Michael Pavlovich Svinin (NIEFA)

RPAP020—Fixed Field Alternating Gradient Accelerators (FFAG) for Fast Hadron Cancer Therapy
Eberhard Keil (CERN), Dejan Trbojevic (BNL), Andrew Sessler (LBNL)

RPAP021—A Portable Electron Radiography System
Frank Edward Merrill, Christopher Morris (LANL), Alan Wolfe Hunt (ISU)

RPAP022—A Study of Storage Ring Requirements for an Explosive Detection System Using NRA Method
Tai-Sen Wang, Thomas Kwan (LANL)

RPAP023—RF-Based Accelerators for HEDP Research
John William Staples, Andrew Sessler (LBNL), Peter Ostroumov (ANL), Weiren Chou (Fermilab), Roderich Keller (LBNL/AFR)

RPAP024—The ORNL Multicharged Ion Research Facility (MIRF) High Voltage Platform Project
Fred Wolfgang Meyer, Mark Bannister, Jerry Hale, Jim Johnson (ORNL), Denis Hitz (CEA Grenoble)

RPAP025—A 7 MeV S-Band Variable Pulse Length Electron Accelerator
Michael Hernandez, Hank Deruyter, Andrey Valentinovich Mishin, Alexander J. Saversky, Dave Skowbo, Richard Smith (AS&E)

RPAP026—Latest Results on X-Band Linac Systems for Radiation Therapy

Alexander J. Saversky, Hank Deruyter, Michael Hernandez, Andrey Valentinovich Mishin, Dave Skowbo (AS&E)

RPAP027—Portable X-Band Linear Electron Accelerators for Radiographic Applications

Alexander J. Saversky, Hank Deruyter, Michael Hernandez, Andrey Valentinovich Mishin, Dave Skowbo (AS&E)

RPAP028—Highly Effective Method for Detection of Heavy Elements with the Use of Dual Energies

Valeriy Afanasev, Sergey Pismenetskiy, Gennady Popov, Dmitriy Rudychev, Vladimir Rudychev (KhNU)

RPAP029—The Features of the Dose Distribution in Multi-Layer Targets Irradiated by Electron Beam

Gennady Popov, Valentin Lazurik, Valentina Lazurik, Yuriy Rogov (KhNU), Iwona Kaluska, Zbigniew Zimek (Institute of Nuclear Chemistry and Technology)

RPAP030—Application of Mathematical Modeling in Electron Beam and X-Ray Processing

Gennady Popov, Valentin Lazurik, Valentina Lazurik, Yuriy Rogov (KhNU)

RPAP031—250-MeV FFAG Proton Accelerator as a Medical Facility

Alessandro Ruggiero (BNL)

RPAP032—Hardware Tracking Related to Compact Medical Pulse Synchrotron

Kuninori Endo, Kazumi Egawa, Zhigao Fang, Shinji Yamanaka (KEK)

RPAP033—Investigation of X-Ray Harmonics of the Polarized Inverse Compton Scattering Experiment at UCLA

Adnan Doyuran, Robert Joel England, Chan Joshi, James Rosenzweig, Sergei Tochitsky, Gil Travish, Oliver Williams (UCLA)

RPAP034—Use Recirculator

Ivan Guk, Anatoly Nikolayevich Dovbnya, Stanislav Kononenko, Fedor Peev, Alexander Tarasenko (NSC/KIPT), Jan Botman, Marnix Van der Wiel (TUE)

RPAP035—Photonuclear and Radiation Effects Testing with a Refurbished 20 MeV Medical Electron Linac

Timothy Webb, Jill Ellen Petrisko, Randy Spaulding (IAC, Pocatello), Roger Assink (Sandia National Laboratories)

RPAP036—A Compact 5 MeV S-Band Electron Linac Based X-Ray Source for Industrial Radiography

Lucrezia Auditore, Renato Calogero Barnà, Domenico De Pasquale, Umberto Emanuele, Antonio Trifirò, Marina Trimarchi (INFN & Messina University), Antonio Italiano (INFN—Gruppo Messina)

RPAP037—Study of the Dynamics in a Linac Booster for Proton Therapy in the 30-62 MeV Energy Range

Vittorio Giorgio Vaccaro (Naples University Federico II and INFN), Tarcisio Clauer, Antonio Rainò (Bari University), Vincenzo Variale (INFN-Bari), Maria Rosaria Masullo (INFN-Napoli), Carlo De Martinis, Dario Giove, Marco Mauri (INFN/LASA), S. Lanzone (Naples University Federico II)

RPAP038—An Advantage of the Equivalent Velocity Spectroscopy for Femtosecond Pulse Radiolysis

Takafumi Kondoh, Yang Jinfeng, Takahiro Kozawa, Seiichi Tagawa, Hiroshi Tomosada, Yoichi Yoshida (ISIR)

RPAP039—Accelerator and Ion Beam Tradeoffs for Studies of Warm Dense Matter

John J. Barnard, Debra Callahan, Alex Friedman, Richard Lee, Max Tabak (LLNL), David Rose, Dale Welch (ATK-MR), Edward Lee, B. Grant Logan, Parthiban Santhanam, Andrew Sessler, John William Staples, Jonathan Wurtele, Simon Yu (LBNL), Ronald Davidson, Larry Grisham (PPPL), Richard J. Briggs (SAIC), Craig Olson (Sandia National Laboratories)

RPAP040—Design of a Fast Neutral He Beam System for Feasibility Study of Charge-Exchange Alpha-Particle Diagnostics in a Thermonuclear Fusion Reactor

Katsuhiro Shinto, Sumio Kitajima, Mamiko Sasao, Hiroshi Sugawara, Shu Takeuchi (Graduate School of Engineering), Satoru Kiyama (AIST), Motoi Wada (Doshisha University), Osamu Kaneko, Masaki Nishiura (NIFS)

RPAP041—Accelerator-Driven Thorium-Cycle Nuclear Power-Recent Developments

Peter M. McIntyre, Akhdiyor Sattarov (Texas A&M University)

RPAP043—Beam-Based Alignment in the RHIC eCooling Solenoids

Peter Cameron, Ilan Ben-Zvi, William Craig Dawson, Animesh Kumar Jain, Jorg Kewisch, Vladimir N. Litvinenko, William W. MacKay, Christoph Montag, Vadim Ptitsyn, Todd Satogata, Carl Schultheiss, Vitaly Yakimenko (BNL)

RPAP044—Linerizing the Response of the NSRL Synchronous Recycling-Integrators

Peter Oddo, Adam Rusek, Thomas Russo (BNL)

RPAP045—Development of Laser-Induced Fluorescence Diagnostic for the Paul Trap Simulator Experiment

Moses Chung, Ronald Davidson, Philip Efthimion,

Erik P. Gilson, Richard Majeski, Edward Startsev

(PPPL)

RPAP046—Real-Time Beam Loss Monitor Display using FPGA Technology

Matt Richard William North, Dean Adams, Anthony

Kershaw, Christopher M. Warsop (CCLRC/RAL/ISIS)

RPAP047—DAQ System of BPM and BCT for the BEPCII Linac

Jianshe Cao, Qiang ye (IHEP Beijing)

RPAP048—SNS Diagnostics Timing Integration

Cary D. Long (Innovative Design), Willem Blokland,

Darryl J. Murphy, James Pogge, John David Purcell

(ORNL/SNS), Madhan Sundaram (University of

Tennessee)

RPAP049—Beam Diagnostics with Optical Fiber Optics

Yan Yin (Y.Y. Labs, Inc.)

RPAP050—A New Extended-Energy Neutron Dose Equivalent Monitor: The ABC1260

David William Flynn, Christopher Brennan, Darius

Montvila, Christopher Taylor (Framework Scien-

tific), Francesco d'Errico (Yale University)

Poster Session RPAT—Instrumentation

Meeting Room 200 A-C, 8:30-12:20

RPAT001—Experimental Results of a Non-Destructive Emittance Measurement Device for Negatively Charged H-Beams

Christoph Gabor, Horst Klein, Oliver Meusel, Jürgen Pozimski, Ulrich Ratzinger (IAP)

RPAT002—Production of Inorganic Thin Scintillating Films for Ion Beam Monitoring Devices

Maurizio Re, Giuseppe A. Pablo Cirrone, Luigi

Cosentino, Giacomo Cuttone, Paolo Finocchiaro

(INFN/LNS), Alex Hermann, Hugo Thienpont,

Jurgen Van Erps, Michael Vervaeke, Bart Volckaerts,

Pedro Vynck (VUB)

RPAT003—SLIM (Secondary Emission Monitor for Low Interception Monitoring)—An Innovative Non-Destructive Beam Monitor for the Extraction Lines of a Hadrontherapy Centre

Laura Badano, Ornella Ferrando (TERA), Gianni Molinari (CERN)

RPAT004—Beam Profile Measurement with Wire Scanners for J-PARC Linac

Hisashi Akikawa, Kazuo Hasegawa, Tomohiro Ohkawa, Hiroshi Yoshikawa (JAERI), Fumio Hiroki, Junichi Kishiro, Yasuhiro Kondo, Hironao Sakaki, Susumu Sato, Mikio Tanaka, Tetsuo Tomisawa, Akira Ueno (JAERI/LINAC), Zenei Igarashi, Masanori Ikegami, Seishu Lee, Kazuyuki Nigorikawa, Takeshi Toyama (KEK)

RPAT005—Beam Diagnostics for the J-PARC Main Ring Synchrotron

Takeshi Toyama, Dai Arakawa, Yoshinori Hashimoto, Seishu Lee, Takako Miura, Suguru Muto (KEK), Naoki Hayashi, Junichi Kishiro, Ryoji Toyokawa (JAERI/J-PARC)

RPAT006—Design and Initial Tests of a Gas Scattering Energy Monitor in the PEFP RFQ and DTL
Sang-Hyo Han, Yong-Sub Cho (KAERI)

RPAT007—Status of Beam Diagnostic Systems for the PEFP

Jangho Park, Jung Yun Huang, Woon Ha Hwang, Yong Woon Park, Sung-Ju Park (PAL), Yong-Sub Cho, Byung-Ho Choi, Sang-Hyo Han (KAERI)

RPAT008—Prototype Digital Beam Position and Phase Monitor for the 100-MeV Proton Linac of PEFP

In-Ha Yu, Do Tae Kim, Sung-Chul Kim, In-Soo Park, Sung-Ju Park (PAL), Yong-Sub Cho (KAERI)

RPAT009—FPGA-Based Instrumentation for the Fermilab Antiproton Source

Bill Ashmanskas, Sten Hansen, Terry Kiper, David Peterson (Fermilab)

RPAT010—Development of a New Data Acquisition System for the Fermilab Beam Loss Monitors

Alan Baumbaugh, Craig Drennan, Kelly Knickerbocker, Jonathan Lewis, Alberto Marchionni, Cecil Needles, Marvin Olson, Stephen Pordes, Michael Utes (Fermilab)

RPAT011—Digital Signal Processing the Tevatron BPM Signals

Gugstavo I. Cancelo (Fermilab)

RPAT012—A Hardware Transverse Beam Frequency Response Simulator

Jia Ning, Cheng-Yang Tan (Fermilab)

RPAT013—Signal Processing for Longitudinal Parameters of the Tevatron Beam

Stephen Pordes, Brian Fellenz, Robert Henry Flora, Adam Para, Alvin V. Tollestrup (Fermilab)

RPAT014—Measuring Out-of-Bucket Protons in the Fermilab Booster Neutrino Beam

Eric Prebys (Fermilab)

RPAT015—First Results of a Digital Beam Phase Monitor at the Tevatron

Jean-Paul Carneiro, Jim Steimel (Fermilab)

RPAT016—Tevatron PLL Tune Tracking Results

Cheng-Yang Tan (Fermilab)

RPAT017—Using Time Separation of Signals to Obtain Independent Proton and Antiproton Beam Position Measurements Around the Tevatron

Robert C. Webber (Fermilab)

RPAT018—Simultaneous Position Measurements of Protons and Anti-Protons in the Tevatron

Robert Kenneth Kutschke, Michael A. Martens, Jim Steimel, Robert C. Webber, Stephen Wolbers (Fermilab)

RPAT019—Use of a Reconfigurable VME Module To Measure Beam Energy at the Los Alamos Proton Storage Ring

Robert Merl, Thomas Spickermann (LANL)

RPAT020—Development of the LANSCE Injection Line and Transition Region Profile Monitor System

Robert Merl, J. Douglas Gilpatrick, John F. Power, Fred E. Shelley (LANL)

RPAT021—1-MeV Electrostatic Ion Energy Analyzer

Frank Bieniosek, Matthaeus Leitner (LBNL)

RPAT022—Optical Faraday Cup for Heavy Ion Beams

Frank Bieniosek, Shmuel Eylon, Prabir Kumar Roy, Simon Yu (LBNL)

RPAT023—Development of Diagnostics for the Neutralized Ion Beam Drift Compression Experiments (NDCX)

Shmuel Eylon, Frank Bieniosek, Wayne Greenway, Enrique Henestroza, Prabir Kumar Roy, Simon Yu (LBNL), Ronald Davidson, Erik P. Gilson, Adam Sefkow (PPPL)

RPAT024—SNS Ring and Transfer Line BPM System

William Craig Dawson, Peter Cameron, Christopher Degen, Martin Kesselman (on leave), Joe Mead, Kurt Vetter (BNL)

RPAT025—RHIC Zero-Degree Calorimeter Spectrum Analyzer Design

Justin Gullotta, Angelika Drees, Thomas Russo, Charles Theisen (BNL)

RPAT026—RHIC Electron Detector Front-End Electronics Design

Justin Gullotta, Ubaldo Iriso, Thomas Russo, S.Y. Zhang (BNL)

RPAT027—Tomographic Measurement of Longitudinal Emittance Growth Due to Stripping Foils

Christoph Montag, Leif Ahrens, Peter Thieberger (BNL)

RPAT028—RHIC BPM System Modifications and Performance

Todd Satogata, Peter Cameron, Phil Cerniglia, John Cupolo, Anthony J. Curcio, William Craig Dawson, Christopher Degen, Justin Gullotta, Joe Mead, Thomas Russo, Robert Sikora (BNL)

RPAT029—Update on RHIC Schottky Diagnostics

Kurt Vetter, Peter Cameron, John Cupolo, Christopher Degen, Roger C. Lee (BNL)

RPAT030—Beam Position Electronics for Transfer Lines in the Fermilab Accelerator Complex

Nathan Eddy, Claudio Hector Rivetta (Fermilab)

RPAT031—Beam Profile Measurement with Flying Wires at the Fermilab Recycler Ring

Martin Hu, Peter Wilson (Fermilab)

RPAT032—An Ionization Profile Monitor for the Tevatron

Andreas Jansson, Mark Bowden, Kwame Bowie, Alan Bross, Robert Dysert, Thomas Fitzpatrick, Richard Kwarciany, Carl Lundberg, Hogan Nguyen, Claudio Hector Rivetta, David Slimmer, Linda Valerio, James Zagel (Fermilab)

RPAT033—Beta Function Measurement in the Tevatron Using Quadrupole Gradient Modulation

Andreas Jansson, Paul Lebrun, James T. Volk (Fermilab)

RPAT034—The Upgraded Synchrotron Light Monitor at the Tevatron

Eugene Lorman, Randy Thurman-Keup (Fermilab)

RPAT035—Development of an Optical Transition Radiation Detector for Profile Monitoring of Antiproton and Proton Beams at FNAL

Victor Scarpine, Carl Lindenmeyer, Gianni Tassotto (Fermilab), Alex Lumpkin (ANL)

RPAT036—Measurement of the Intensity of the Beam in the Abort Gap at the Tevatron Utilizing Synchrotron Light

Randy Thurman-Keup, Thomas Meyer, Stephen Pordes (Fermilab), Stefano De Santis (LBNL)

RPAT037—Development of the Laser Based 3-D Beam Profile Monitor System for the J-PARC Linac

Seishu Lee (KEK)

RPAT038—Diagnostic for Electron Clouds Trapped in Quadrupole Magnets

Robert James Macek (LANL/LANSCE), Andrew Arnold Brownman (TechSource)

RPAT039—Feasibility Study of Using an Electron Beam for Profile Measurements in the SNS Accumulator Ring

Alexander V. Aleksandrov, Saeed Assadi, Sarah M. Cousineau, Viatcheslav V. Danilov, Stuart Henderson, Michael Plum (ORNL/SNS), Pavel Logatchev, Aleksander Starostenko (BINP SB RAS)

RPAT040—Matching BPM Stripline Electrodes to Cables and Electronics

Craig Deibebe (ORNL/SNS), Sergey Kurennoy (LANL)

RPAT041—Microbunch Measurement in the SNS Linac Using BPM Electrodes

Craig Deibebe, Alexander V. Aleksandrov, John Galambos, Stuart Henderson (ORNL/SNS)

RPAT042—Emittance Scanner Optimization for Low Energy Ion Beams

Martin P. Stockli, Robert Welton (ORNL/SNS)

RPAT043—Developments of the Calibration Tools for Beam Position Monitor at J-PARC Linac

Susumu Sato, Hisashi Akikawa, Tetsuo Tomisawa, Akira Ueno (JAERI/LINAC), Zenei Igarashi, Masanori Ikegami, Norihiko Kamikubota, Seishu Lee, Takeshi Toyama (KEK)

RPAT044—Secondary Emission Monitors for the NuMI Beam Line at Fermilab

Sacha Elmer Kopp, Dharmaraj Indurthy, Zarko Pavlovich, Marek Proga, Robert Miles Zwaska (The University of Texas at Austin)

RPAT045—Beam Phase Detector for Proton Therapy Facilities

*Bachtior Aminov, Markus Getta, Sergej Kolesov,
Helmut Piel, Nico Pupeter (CRE), Thomas Stephani,
Jan Hein Timmer (ACCEL)*

RPAT046—Development of a Remotely Controllable High Sensitive Electrometer for Beam Current Measurements

Nico Pupeter (CRE), Thomas Stephani, Jan Hein Timmer (ACCEL)

RPAT047—Preliminary Design of a Femtosecond Oscilloscope

Edmond David Gazazyan, Karo Ispirian, Amour Margaryan (YerPhI), Edouard Laziev (YerPhI; CANDLE)

RPAT048—An X-Ray BPM and Accompanying Electronics

Haroldo Jose Onisto, Osmar Roberto Bagnato, Marcelo Juni Ferreira (LNLS)

RPAT049—Numerical Studies on the Electro-Optic Sampling of Ultrashort Electron Bunches

Sara Casalbuoni, Holger Schlarb, Bernhard Schmidt, Bernd Steffen (DESY), Peter Schmüser, Axel Winter (Uni HH)

RPAT050—Electro Optic Bunch Length Measurements at the VUV-FEL at DESY

Bernd Steffen, Sara Casalbuoni, Ernst-Axel Knabbe, Holger Schlarb, Bernhard Schmidt (DESY), Peter Schmüser, Axel Winter (Uni HH)

RPAT051—Measurement of Dynamic Beta Effects on Horizontal Beam Size at KEKB Using SR Interferometer Equipped with Retrofocus Optics

John Walter Flanagan, Hitoshi Fukuma, Shigenori Hiramatsu, Toshiyuki Mitsuhashi (KEK)

RPAT052—Vertical Beam Size Measurement by Streak Camera under Colliding and Single Beam Conditions in KEKB

Hitomi Ikeda, John Walter Flanagan, Hitoshi Fukuma, Yoshihiro Funakoshi, Shigenori Hiramatsu, Toshiyuki Mitsuhashi, Kazuhito Ohmi, Sadaharu Uehara (KEK)

RPAT053—Movement of BPMs Due to Thermal Stress in KEKB

Masaki Tejima, Mitsuhiro Arinaga, Hitoshi Fukuma, Shigenori Hiramatsu, Hitoshi Ishii, Makoto Tobiayama (KEK)

RPAT054—Beam Position Monitor at the PLS BTL

Sung-Chul Kim, Myung-Hwan Chun, Yeung-Jin Han, Jung Yun Huang, Do Tae Kim, Wol Woo Lee (PAL)

RPAT055—Low-Energy Electron Beam Diagnostics Based on the Optical Transition Radiation

Gennady Naumenko, Boris Kalinin, A.P. Potylitsyn, Gennady Saruev, Alexi Sharafutdinov (Tomsk Polytechnic University), Alexander Aryshev (KEK)

RPAT058—The IEEE-1394 Digital Camera Application in the Taiwan Light Source

Changhor Kuo, Kuo-Tung Hsu (NSRRC)

RPAT059—The SRI Beam Size Monitor Developed at NSRRC

Tse-Chuan Tseng, June-Rong Chen, H.C. Ho, Chia-Jui Lin, Shen-Yaw Perng, Duan Jen Wang, Jeremy Wang (NSRRC)

RPAT060—Improvement on the Diagnostic System of TLS Transport Line

Tzong-Shyan Ueng, Chin-Chun Chang, June-Rong Chen, Hsin-Pai Hsueh, Chien-Kuang Kuan, Tsai-Fu Lin (NSRRC)

RPAT061—New Electron Beam Position Monitoring and Feedback System Upgrades for the Synchrotron Radiation Source at Daresbury Laboratory

Robert Smith, Mike Dufau, Brian Martlew (CCLRC/DL/ASTeC)

RPAT062—Design and Operation of a Radiative Bhabha Luminosity Monitor for CESR-c

Mark Alan Palmer, Volker Crede, David Rubin, Jeffrey Claiborne Smith (Cornell University), Helmut Vogel (CMU), Melissa Cravey, James Napolitano (RPI), Katherine Laird Dooley (Vassar)

RPAT063—A Bunch-By-Bunch and Turn-By-Turn Instrumentation Hardware Upgrade for CESR-c

Mark Alan Palmer, John Dobbins, Charles Ralph Strohman (Cornell University)

RPAT064—Beam-Based Calibration of the Electron Energy in the Fermilab Electron Cooler

Sergey Seletsky (Rochester University), Alexander V. Shemyakin (Fermilab)

RPAT065—A Wire Scanner Design for Electron Beam Profile Measurement in the Linac Coherent Light Source Undulator

James L. Bailey, Thomas Buffington, Bingxin Yang (ANL)

RPAT066—Transverse Emittance Measurements of the AWA RF Photoinjector using a Pepper Pot

John Gorham Power, Sergey P. Antipov, Manoel Conde, Wei Gai, Chunguang Jing, Richard Konecny, Wanming Liu, Haitao Wang, Zikri Yusof (ANL)

RPAT067—Beam Angle Measurement Using Cherenkov Radiation

Takahiro Watanabe, Marcus Babzien, Karl Kusche, Vitaly Yakimenko (BNL)

RPAT068—Proposed Diagnostics for the NSLS-II

Igor Pinayev, Johan Bengtsson, Stephen L. Kramer, James Rose, Timur Shaftan (BNL/NSLS)

RPAT069—Electron Beam Size Measurements in a Cooling Solenoid

Thomas K. Kroc, Timofei Borisovich Bolshakov, Alexey Burov, Alexander V. Shemyakin (Fermilab), Sergey Seletsky (Rochester University)

RPAT070—Mechanical and Thermal Design of the CEBAF Hall A Beam Calorimeter

Michael E. Bevins, Anthony Roland Day, Pavel Degtiarenko, Lawrence A. Dillon-Townes, Arne Freyberger, Arun Saha, Stephanie Slachtouski (Jefferson Lab), Ronald Gilman (Rutgers University)

RPAT071—Digital Beam Position Monitor for the Happex Experiment

Hai Dong, Sherlon Renee Kauffman, John Musson (Jefferson Lab)

RPAT072—The General ElectroN Induced Emission (GENIE) System

Michael Anthony Epps, Paul Gueye, Reza Kazimi (Jefferson Lab)

RPAT073—A Precision Calibration Test Stand for DARHT II Beam Position Monitors

Jeffrey Johnson (LANL)

RPAT074—PEP-II SLAC Transverse Feedback Electronics Upgrade

Jonah Weber, Michael Chin, Lawrence Doolittle (LBNL), Ron Akre (SLAC)

RPAT075—Optical Synchronization Systems for Femtosecond X-Ray Sources

Russell Wilcox, John William Staples (LBNL), Ronald Holzwarth (Menlo Systems GmbH)

RPAT076—Smith Purcell Radiation Bunch-Length Measurement

Stephen Korbly, Amit S. Kesar, Roark A. Marsh, Richard J. Temkin (MIT/PSFC)

RPAT077—Beam Test Proposal of an ODR Beam Size Monitor at the SLAC FFTB

Yasuo Fukui, Paul Bolton, Marc Ross (SLAC), Alexander Aryshev, Pavel Karataev, Toshiya Muto, Makoto Tobiyama, Junji Urakawa (KEK), Ryosuke Hamatsu (TMU), Gennady Naumenko, A.P.

Potylitsyn (Tomsk Polytechnic University), David Cline, Feng Zhou (UCLA)

RPAT078—Bunch Length Measurements Using Coherent Transition Radiation

Rasmus Ischebeck, Christopher Barnes, Franz-Josef Decker, Mark Hogan, Richard Iverson, Patrick Krejcik, Caolionn O'Connell, Robert Siemann, Dieter Walz (SLAC), Ian Blumenfeld (Stanford University), Chris Clayton, Chengkun Huang, Devon K. Johnson, Wei Lu (UCLA), Suzhi Deng, Bing Feng, Erdem Oz (USC)

RPAT079—Resolution Issues in Transverse Electron Beam Measurements Using Optical Transition Radiation

Rasmus Ischebeck, Franz-Josef Decker, Mark Hogan, Richard Iverson, Patrick Krejcik, Robert Siemann, Dieter Walz (SLAC), Melissa Lincoln (Stanford University), Chris Clayton, Chengkun Huang, Wei Lu (UCLA), Suzhi Deng, Erdem Oz (USC)

RPAT080—The SPEAR 3 Synchrotron Light Monitor

Jeff Corbett, Cecile Limborg-Deprey, Andrew Ringwall (SLAC), Walter Mok (Life Imaging Technology)

RPAT081—Initial Scraper Measurements in SPEAR 3

Jeff Corbett, James A. Safranek, Andrei Terebilo (SLAC)

RPAT082—Measurement of the SLAC Ultra-Short Bunch Length Using Coherent Transition Radiation (CTR) Autocorrelation

Patric Muggli (USC), Holger Schlarb (DESY), Paul Emma, Mark Hogan, Rasmus Ischebeck, Patrick Krejcik, Robert Siemann, Dieter Walz (SLAC)

RPAT083—Beam Profile Measurements and Simulations of the Laser-Wire Scanner at PETRA

Grahame A. Blair, Ilya Agapov, Gary Boorman, John Carter, Chafik Driouichi, Michael T. Price (Royal Holloway), Thorsten Kamps (BESSY GmbH), Klaus Balewski, Hans-Christoph Lewin, Siegfried Schreiber, Kay Wittenburg (DESY), Nicolas Delerue, David Francis Howell (OXFORDphysics), Stewart Takashi Boogert, Stephen Malton (UCL)

RPAT084—Design of the APS RF BPM Data Acquisition Upgrade

Robert M. Lill, Frank Lenkszus, Eric Norum, Anthony Pietryla (ANL)

RPAT085—Initial Imaging of 7-GeV Electron Beams with OTR/ODR Techniques at APS

*Alex Lumpkin, William Berg, Nicholas Sereno,
Chihyuan Yao (ANL)*

RPAT086—Dual-Sweep Streak Camera Measurements of the APS User Beams

*Alex Lumpkin, Bingxin Yang (ANL), Fumito
Sakamoto (UTNL)*

RPAT087—Design of a High-Resolution Optical Transition Radiation Imaging System for Electron Beam Size Measurements in the Linac Coherent Light Source Undulator

*Bingxin Yang, James L. Bailey, S. Joshua Stein, Dean
Walters (ANL)*

RPAT088—New Energy-Spread-Feedback Control System Using Nondestructive Energy-Spread Monitor at the KEKB Injector Linac

*Masanori Satoh, Kazuro Funukawa, Tsuyoshi
Suwada (KEK)*

RPAT089—Advances in Optical Transition and Diffraction Radiation Emittance Diagnostics

*Ralph Fiorito, Anatoly Shkvarunets (IREAP),
Takahiro Watanabe, Vitaly Yakimenko (BNL)*

RPAT090—The Study of New Signal Processing Technique in Photon Beam Position Monitors

*Shunfu Lin, Hui Gao, Ping Lu, Baogen Sun (USTC/
NSRL)*

RPAT091—Longitudinal Electron Bunch Diagnostics Using Coherent Transition Radiation

*Daniel Mihalcea, Courtlandt L. Bohn (Northern
Illinois University), Philippe Regis-Guy Piot
(Fermilab)*

RPAT092—Conceptual Design of an Insertion Device for Non-Destructive Beam Diagnostics of a Low-Emittance Synchrotron Light Source

Mitsuhiko Masaki (JASRI/SPring-8)

RPAT093—Libera Electron Beam Position Processor

Rok Ursic (Instrumentation Technologies)

RPAT094—Femtosecond Synchronisation of Ultrashort Pulse Lasers to a Microwave RF Clock

*Axel Winter (Uni HH), Ernst-Axel Knabbe, Stefan
Simrock, Bernd Steffen (DESY), Nikolay Ignashin,
Anatoli Simonov, Sergei Sytov (IHEP Protvino)*

RPAT095—Time Resolved X-Ray Spot Size Diagnostic

*Roger Richardson, Steven Falabella, Frank Chambers,
Gary Guethlein, Brett Raymond, John Weir
(LLNL)*

RPAT096—High-Precision Resonant Cavity Beam Position and Emittance Monitor

Nikolai Barov, Jin-Soo Kim (Far-Tech, Inc.), Roger Heering Miller, Christopher Dennis Nantista (SLAC)

RPAT097—2-D Low Energy Electron Beam Profile Measurement Based on CT Algorithm with Multi-Wire Scanner

Nengjie Yu, Quanfeng Li, Chuan-Xiang Tang, Shuxin Zheng (TUB)

RPAT098—Phase-Space Dynamic Tracking by a Two Pickups Data Acquisition System

Alessandro Drago, Maria Biagini, Susanna Guiducci, Catia Milardi, Miro Preger, Cristina Vaccarezza, Mikhail Zobov (INFN/LNF)

RPAT099—Novel Method for Phase-Space Tomography

Kevin Chalut (Duke University), Vladimir N. Litvinenko (BNL)

RPAT100—Radiation-Hard Beam Position Detector for Use in the Accelerator Dump Lines

Pavel Degtarenko, Danny Wyane Dotson, Vladimir Popov (Jefferson Lab)

Oral Session ROPA—Controls and Computing
Ballroom A @ 13:50
Chair: L. Hoff (BNL)

13:50 ROPA001—XAL Application Programming Structure

John Galambos, Chungming Chu, Sarah M. Cousineau, Thomas Pelaia, Andrei P. Shishlo (ORNL/SNS), Christopher K. Allen (LANL)

14:15 ROPA002—CLS: A Fully Open-Source Control System

Elder Matias, Russ Berg, Terry Johnson, Robby Tanner, Tony Wilson, Glen Wright (CLS)

14:40 ROPA003—Present Status of the J-PARC Control System

Tadahiko Katoh, Kazuro Furukawa, Noboru Yamamoto (KEK), Hiroshi Yoshikawa (JAERI), Hironao Sakaki (JAERI/LINAC)

14:55 ROPA004—CEBAF Control Room Renovation

Michael Spata, Tom Christopher Oren (JLab)

15:10 ROPA005—High Level Control Applications for SOLEIL Commissioning and Operation

Laurent Stanislas Nadolski, Katy Ho, Nicolas Leclercq, Majid Ounsy, Sylvain Petit (SOLEIL)

Oral Session ROPB—Two-Stream Instabilities and Collective Processes, Ballroom B @ 13:50
Chair: G. Rumolo (CERN)

13:50 ROPB001—Suppressing Electron Cloud in Future Linear Colliders

Mauro Torino, Francesco Pivi (SLAC)

14:15 ROPB002—Experiments Studying Desorbed Gas and Electron Clouds in Ion Accelerators

Arthur Molvik, John J. Barnard, Ronald Cohen, Alex Friedman, Michel Kireeff Covo, Steven Mocko Lund (LLNL), David Baca, Frank Bieniosek, C. M. Celata, Peter Seidl, Jean-Luc Vay, William Waldron (LBNL)

14:40 ROPB003—Electron Cloud Dynamics in High-Intensity Rings

Lanfa Wang, Jie Wei (BNL)

15:05 ROPB004—Effect of Lattice and Electron Distribution in Electron-Cloud Instability Simulations for the CERN SPS and LHC

Elena Benedetto, Gianluigi Arduini, Federico Roncarolo, Frank Zimmermann (CERN), Giovanni Rumolo (GSI), Kazuhito Ohmi (KEK), Bing Feng, Ali Feiz Ghalam, Tom Katsouleas (USC)

15:20 ROPB005—Recent Experiment Results on Fast Ion Instability at 2.5 GeV PLS

Eun-San Kim, Yeung-Jin Han, Jung Yun Huang, In Soo Ko, Chong-Do Park, Sung-Ju Park (PAL), Hitoshi Hukuma (KEK)

Oral Session ROPC—Low- and Medium-Energy Accelerators and Rings, Ballroom C @ 13:50
Chair: M. Plum (ORNL/SNS)

13:50 ROPC001—SNS Warm Linac Commissioning Results

Alexander V. Aleksandrov (ORNL/SNS)

14:15 ROPC002—J-PARC Commissioning Results

Kazuo Hasegawa (JAERI)

14:40 ROPC003—RIKEN RI Beam Factory Project

Yasushige Yano (RIKEN/RARF/CC)

15:05 ROPC004—Recent Intensity Increase in the CERN Accelerator Chain

Elena Shaposhnikova, Gianluigi Arduini, Thomas Bohl, Michel Chanel, Roland Garoby, Steven Hancock, Klaus Hanke, Trevor Paul Linnecar, Elias Métral, Rende Richard Steerenberg, Bernard Vandorpe (CERN)

15:20 ROPC005—RIA Post Accelerator Design

Stan Owen Schriber (NSCL)

Oral Session ROPA (Cont.)—Controls and Computing
Ballroom A @ 15:30
Chair M. Borland (ANL)

15:30 ROPA006—Terascale Beam-Beam Simulations for Tevatron, RHIC and LHC

Ji Qiang (LBNL)

15:55 ROPA007—Vlasov Simulations of Beams and Halo

Eric Sonnendrucker (IRMA), Jean-Louis Lemaire (CEA/DIF/DPTA/SP2A)

16:20 ROPA008—The Grid

Wolf-Dieter Klotz (ESRF)

16:45 ROPA009—Bridging Timescales for Simulating Electron Clouds

Ronald Cohen, Alex Friedman (LLNL), Jean-Luc Vay (LBNL)

17:00 ROPA010—TBD

Oral Session ROPB (Cont.)—Two-Stream Instabilities and Collective Processes, Ballroom B @ 15:35

Chair: I. Hofmann (GSI)

15:35 ROPB006—Filling in the Roadmap for Self-Consistent Electron Cloud and Gas Modeling

Jean-Luc Vay (LBNL), Miguel Furman (LBNL/AFR), Ronald Cohen, Alex Friedman, David Grote, Arthur Molvik (LLNL), Peter Stoltz, Seth Andrew Veitzer (Tech-X), John verboncoeur (UCB)

16:00 ROPB007—3-D Parallel Simulation Model of Continuous Beam-Electron Cloud Interactions

Ali Feiz Ghalam, Tom Katsouleas (USC), Viktor K. Decyk, Warren Mori (UCLA)

16:25 ROPB008—Halo Mitigation Using Nonlinear Latices

Kiran G. Sonnad, John R. Cary (CIPS)

16:50 ROPB009—Betatron Sidebands Due to Electron Clouds Under Colliding Beam Conditions

John Walter Flanagan, Hitoshi Fukuma, Shigenori Hiramatsu, Hitomi Ikeda, Kazuhito Ohmi, Makoto Tobiyama, Sadaharu Uehara (KEK)

17:05 ROPB010—Self-Consistent Electron-Cloud Simulation for Long Proton Bunches

Andrei P. Shishlo, Sarah M. Cousineau, Viatcheslav V. Danilov, Stuart Henderson, Jeffrey Alan Holmes (ORNL/SNS), Shyh-Yuan Lee, Yoichi Sato (IUCF), Robert James Macek (LANL/LANSCE)

**Oral Session ROPC (Cont.)—Low- and Medium-Energy
Accelerators and Rings, Ballroom C @ 15:35
Chair: R. Garnett (LANL)**

15:35 ROPC006—Commissioning of Fermilab's Electron Cooling System for 8-GeV Antiprotons
Sergei Nagaitsev (Fermilab)

16:00 ROPC007—Status of the Proton Engineering Frontier Project (PEFP) at KAERI
Byung-Ho Choi (KAERI)

16:25 ROPC008—Experimental Progress in Fast Cooling in the ESR
Markus Steck, Karl Beckert, Peter Beller, Bernhard Franzke, Fritz Nolden (GSI)

16:50 ROPC009—First Acceleration with Superconducting RF Cavities at ISAC-II
Robert Edward Laxdal, Ken Fong, Marco Marchetto, William Reginald Rawnsley, Victor Verzilov (TRIUMF)

17:05 ROPC010—Testing, Installation, Commissioning and First Operation of the ISIS RFQ Pre-Injector Upgrade
Alan Letchford, Dan Faircloth, Michael Perkins, Alan Stevens, Mark Whitehead (CCLRC/RAL/ISIS)

**Poster Session RPPE—Accelerator Technology
Ballroom E, 13:50–17:10**

RPPE001—The CARE Accelerator R&D Programme in Europe
Olivier N apology, Roy Aleksan, Arnaud Devred (CEA/DSM/DAPNIA), Roland Garoby, Roberto Losito, Louis Rinolfi, Maurizio Vretenar (CERN), Helmut Mais, Dieter Proch (DESY), Andrea Ghigo (INFN/LNF), Terence Garvey (LAL), Andres Den Ouden (Twente University)

RPPE002—Install and Radiation Maintenance Scenario for J-PARC Main Ring
Masakazu Yoshioka (KEK)

RPPE003—Operational Experience of Cooling Water Systems for Accelerator Components at PLS
Kyungryul Kim, Hyung-Gyun Kim (PAL)

RPPE004—A Risk-Oriented Approach for Setting Priorities Among Beneficiaries of Consolidation Funding

Pierre Bonnal, John Poole (CERN)

RPPE005—Ions for LHC: Beam Physics and Engineering Challenges

Stephan Maury, Maria-Elena Angloletta, Vito Baggioolini, Andre Beuret, Alfred Blas, Jan Borburgh, Hans-Heinrich Braun, Helmut Burkhardt, Christian Carli, Michel Chanel, Tony Fowler, Marine Gourber-Pace, Steven Hancock, Charles E. Hill, Michael Hourican, John M. Jowett, Karsten Kahle, Detlef Kuchler, Alessandra Maria Lombardi, Edgar Mahner, Django Manglunki, Michel Martini, Mauro M. Paoluzzi, Flemming Pedersen, Uli Raich, Carlo Rossi, Jean-Pierre Royer, Karlheinz Schindl, Richard Scrivens, Luc Sermeus, Elena Shaposhnikova, Gerard Tranquille, Maurizio Vretenar, Thomas Zickler (CERN)

RPPE006—Air Temperature Analysis and Control Improvement for the Storage Ring Tunnel

Jui-Chi Chang, June-Rong Chen, Zong-Da Tsai (NSRRC), Ming-Tsun Ke (NTUT)

RPPE007—High Precision Temperature Control and Analysis of RF Deionized Cooling Water System

Zong-Da Tsai, Jui-Chi Chang, June-Rong Chen (NSRRC)

RPPE008—Water Induced Vibration in NSRRC

Duan Jen Wang, H.C. Ho, Zong-Da Tsai (NSRRC, Hsinchu)

RPPE009—Extremely High Current, High-Brightness Energy Recovery Linac

Ilan Ben-Zvi, Donald Barton, Dana Beavis, Michael Blaskiewicz, Andrew Burrill, Rama Calaga, Peter Cameron, Xiangyun Chang, David Mark Gassner, Harald Hahn, Ady Hershcovitch, Hsiao-Chaun Hseuh, Dmitry Kayran, Jorg Kewisch, Robert Lambiase, Vladimir N. Litvinenko, Gary McIntyre, Wuzheng Meng, Thomas Nehring, Tony Nicoletti, Brian Oerter, Jim Rank, Triveni Rao, Thomas Roser, Thomas Russo, Joseph Scaduto, Kevin Smith, Neville Willaims, Kuo-Chen Wu, Kin Yip, Alex Zaltsman, Yongxiang Zhao (BNL), Al Burger, Anthony Favale, Douglas Holmes (AES), Michael Cole, John Rathke, Tom Schultheiss, Alan Murray Melville Todd (AES), Jean Roger Delayen, Warren Funk, Peter Kneisel, Larry Phillips, Joseph P. Preble (Jefferson Lab)

RPPE010—Beam Transport Devices for the 10kW Free Electron Laser at Thomas Jefferson National Accelerator Facility

Lawrence A. Dillon-Townes, Stephen Vincent Benson, Michael E. Bevins, George Herman Biallas, David

*Douglas, David Herbert Kashy, Ronald Lassiter,
Danny Machie, Stephanie Slachtaouski, Karl Smith,
Mark Wiseman (Jefferson Lab)*

**RPPE011—SNS Project Electrical Energy Balance
and AC Power Distribution for Major Accelerator
Systems**

Paul Samuel Holik (ORNL/SNS)

**RPPE012—Grounding System of SNS Accelerator
Systems and the Entire SNS Site Grounding**

Paul Samuel Holik (ORNL/SNS)

**RPPE013—A Proposal for a Novel Air Conditioning
of the XFEL Undulator Tunnels**

Jens-Peter Jensen, Sabahattin Celik (DESY)

**RPPE014—Temperature Regulation of the Accelerat-
ing Section in CANDLE Linac**

*Sergey Tunyan, Gayane A. Amatuni, Bagrat
Grigoryan (CANDLE)*

**RPPE015—Diagnostics and Protection Control for
IREN Linac Test Facility**

Victor Zamriy (JINR)

**RPPE016—Protection Level During Extraction,
Transfer and Injection into the LHC**

*Verena Kain, Brennan Goddard, Ruediger Schmidt
(CERN)*

**RPPE017—Active and Passive Machine Protection
Against Failures During the LHC Injection Process**

*Verena Kain, Helmut Burkhardt, Etienne Carlier,
Brennan Goddard, Volker Mertens, Bruno Puccio,
Ruediger Schmidt, Jorg Wenninger, Markus Zerlauth
(CERN)*

**RPPE018—Material Damage Test with 450 GeV
LHC-Type Beam**

*Verena Kain, Jacques Ramillon, Ruediger Schmidt
(CERN), Katharina Vorderwinkler (TU Vienna)*

**RPPE019—Real-Time Beam Loss Monitoring
System for TLS**

*Cheng-Kuo Chang, Jenny Chen, Kuo-Tung Hsu, Kuo
Hwa Hu, Demi Lee (NSRRC)*

**RPPE020—Beam Loss Monitoring and Machine
Protection Designs for the Daresbury Laboratory
Energy Recovery Linac Prototype**

Buckley Stephen, Robert Smith (CCLRC/DL/ASTeC)

**RPPE021—The SNS Machine Protection System:
Early Commissioning Results and Future Plans**

*Coles Sibley III (ORNL), Alan Jones, Dave H.
Thompson (ORNL/ASD)*

RPPE022—Machine Protection System for Concurrent Operation of RHIC and BLIP

*Michelle Wilinski, Steven Bellavia, Joseph Glenn,
Leonard Mausner (BNL)*

RPPE024—High Resolution Integrated Beam Loss Monitoring System

Stephen John Payne (CCLRC/RAL/ISIS)

RPPE025—Beam Loss Monitoring at the CLIC Test Facility 3

Anne Dabrowski, Rachel Scheidegger, Mayda Velasco, Matthew Wood (NU), Hans-Heinrich Braun, Roberto Corsini, Marek Gasior, Thibaut Lefevre, Frank Tecker (CERN)

RPPE026—Operating Experience with Meson Production Targets at TRIUMF

Ewart W. Blackmore, Alisa Dowling, Roman Ruegg, Mark Cheveley Stenning (TRIUMF)

RPPE027—High Intensity High Energy E-Beam Interacting with a Thin Solid State Target: First Results at AIRIX

Michel Caron, Frederic Cartier, David Collignon, Laurent Hourdin, Marc Mouillet, Christian Noel, Dominique Paradis, Olivier Pierret (CEA), Eric Merle (CEA; CEA/DIF), Olivier Mouton, Nicolas Pichoff (CEA/DAM)

RPPE028—The Design of an Internally Cooled Lithium Lens Transformer with Radiation Hardened Dielectrics for the FNAL Antiproton Source

Ryan Schultz, Patrick Hurh, Salman Tariq (Fermilab)

RPPE029—Rotating Aperture Deuterium Gas Cell Development for High Brightness Neutron Production

Brian Rusnak, James Hall, Stewart Shen (LLNL)

RPPE030—Corrugated Thin Diamond Foils for SNS H- Injection Stripping

Robert Shaw, Robert Potter, Leslie Wilson (ORNL), Chong-Jer Liaw (BNL), Charles Feigerle, Michael Peretich (University of Tennessee)

RPPE031—Target and Horn Cooling for the Very Long Baseline Neutrino Oscillation Experiment

Steven Bellavia (BNL)

RPPE032—Measurement of the Secondary Emission Yield of a Thin Diamond Window in Transmission Mode

Xiangyun Chang (BNL)

RPPE033—Engineering the SNS RTBT/Target Interface for Remote Handling

M. Holding, Carl Mike Hammons, Graeme R. Murdoch, Kerry G. Potter, Ronald Thomas Roseberry (ORNL/SNS)

RPPE034—Precision Measurements of Energy Deposition of U Ions in Cu and Stainless Steel Targets at Energies of 500 MeV/u and 950 MeV/u
Edil Mustafin, Ingo Hofmann, Dieter Schardt, Karin Weyrich (GSI), Alexander Fertman, Alexander Golubev, Alexei Kantsyrev, Victor Luckjashin (ITEP), Ludmila Latysheva, Nikolai Sobolevskiy (RAS/INR), Andrey Kunin, Yulia Panova, Vladimir Vatulin (VNIIEF)

RPPE035—Application of Laser-Accelerated High-Energy Protons for Isochoric Heating of Matter
Julien Fuchs (University of Nevada), Jörg Schreiber (LMU), Patrizio Antici, Patrick Audebert, Alessandra Benazzi, Erik Brambrink, Martin Esposito, Michel Koenig, Alessandra Ravasio (LULI)

RPPE036—Pressure Field Distribution in a Conical Tube with a Transient Gas Source and Outgassing
Francisco Tadeu Degasperi (FATEC-SP), Sergio Verardi (IBILCE—UNESP), Marcos Martins, Jiro Takahashi (USP/LAL)

RPPE037—The Vacuum System for PETRA III
Mike Seidel (DESY)

RPPE039—Alumina Ceramics Vacuum Duct for the 3GeV-RCS of the J-PARC
Michikazu Kinsho (Japan Atomic Energy Institute), Norio Ogiwara (JAERI/J-PARC), Yoshio Saito (KEK), Zenzaburo Kabeya (MHI)

RPPE040—Development of the Copper Coating Chamber for the 3rd Generation Light Source
Hiroshi Sakai, Isao Ito, Hirofumi Kudo, Norio Nakamura, Takashi Shibuya, Kenji Shinoe, Hiroyuki Takaki (ISSP/SRL), Masanori Kobayashi (KEK)

RPPE041—Design and Construction of the CERN LEIR Injection Septa
Jan Borburgh, Bruno Balhan, Piero Bobbio, Etienne Carlier, Michael Hourican, Thierry Masson, Antoine Prost (CERN)

RPPE042—Aperture and Field Constraints for the Vacuum System in the LHC Injection Septa
Marcel Gyr, Bernard Henrist, José Miguel Jimenez, Jean-Michel Lacroix, Stefano Sgobba (CERN)

RPPE043—Ultrathin Polyimide-Stainless Steel Heater for Vacuum System Bake-Out
Christian Rathjen, Sébastien Blanchard, Bernard Henrist (CERN)

RPPE044—Vacuum Modifications for the Installation of a New CESR-c Fast Luminosity Monitor

Yulin Li, Yun He, Mark Alan Palmer (Cornell University)

RPPE045—Vacuum Pumping Performance Comparison of Non-Evaporable Getter Thin Films Deposited Using Argon and Krypton as Sputtering Gases

Xianghong Liu, Matthew Raymond Adams, Yun He, Yulin Li (Cornell University)

RPPE046—A Summary and Status of the SNS Ring Vacuum Systems

Michael Mapes, Hsiao-Chaun Hseuh, Jim Rank, Loralie Smart, Robert J. Todd, Daniel Weiss (BNL), Michael Hechler, Peter Ladd (ORNL/SNS)

RPPE047—Upgrade of RHIC Vacuum Systems for High Luminosity Operation

Hsiao-Chaun Hseuh, Michael Mapes, Loralie Smart, Robert J. Todd, Daniel Weiss (BNL)

RPPE048—Physical and Electromagnetic Properties of Customized Coatings for SNS Injection Ceramic Chambers and Extraction Ferrite Kickers

Hsiao-Chaun Hseuh, Michael Blaskiewicz, Ping He, Yong Yung Lee, Chien Pai, Deepak Raparia, Robert J. Todd, Lanfa Wang, Jie Wei, Daniel Weiss (BNL), Stuart Henderson (ORNL/SNS)

RPPE049—Summary on Titanium Nitride Coating of SNS Ring Vacuum Chambers

Robert J. Todd, Ping He, Hsiao-Chaun Hseuh, Daniel Weiss (BNL)

RPPE050—Development of NEG Coating for RHIC Experimental Beam Pipes

Daniel Weiss, Ping He, Hsiao-Chaun Hseuh, Robert J. Todd (BNL)

RPPE051—NEG Pumping Strip Inside Tevatron B2 Magnets

Alex Zuxing Chen, Bruce M. Hanna (Fermilab)

RPPE052—Application of Comb-Type RF-Shield to Bellows Chambers and Gate Valves

Yusuke Suetsugu, Kyo Shibata, Mitsuru Shirai (KEK)

RPPE053—R&D Status of Vacuum Components for the Upgrade of KEKB

Yusuke Suetsugu, Hiromi Hisamatsu, Ken-ichi Kanazawa, Kyo Shibata, Mitsuru Shirai (KEK)

RPPE054—Vacuum Beamline Conditioning for Long and Narrow Wiggler Chambers on the DFELL Storage Ring

Gary Swift, Jingyi Li, Stepan Mikhailov, Y. K. Wu (DU/FEL)

RPPE055—Further Study of Adsorption Performance of Al₂O₃ Coating under Vacuum
Zhang Hai (USTC/NSRL, Hefei, Anhui)

RPPE056—Status of the NSRL Storage Ring UHV System After Project-II
Yong Wang (USTC/NSRL)

RPPE057—Resistive Wall Wakefield in the LCLS Undulator
Karl Leopold Freitag Bane, Gennady Stupakov (SLAC)

RPPE058—Upgrade of the Cryomodule Prototype Before Its Implementation in SOLEIL
Patrick Marchand, Marc Louvet-Monsanglant, Keihan Tavakoli, Catherine Thomas-Madec (SOLEIL), Pierre Bosland, Philippe Bredy, Stéphane Chel, Guillaume Devanz (CEA/DSM/DAPNIA), Roberto Losito, Pierre Maesen (CERN)

RPPE059—Measurements of Epsilon and Mu of Lossy Materials for the Cryogenic HOM Load
Valery D. Shemelin, Matthias Liepe, Hasan Padamsee (Cornell University)

RPPE060—Overview of SNS Cryomodule Performance
Michael Allen Drury, Edward Daly, Kirk Davis, Jean Roger Delayen, Christiana Grenoble, Robby Hicks, Larry King, Tomasz Plawski, Tom Powers, Joseph P. Preble, Haipeng Wang, Mark Wiseman (Jefferson Lab)

RPPE061—SRF Accelerator Technology Transfer Experience from the Achievement of the SNS Cryomodule Production Run
John Hogan, Tim Cannella, Edward Daly, Michael Allen Drury, John Fischer, Tommy Hiatt, Peter Kneisel, John Mammoser, Joseph P. Preble, Timothy Whitlatch, Katherine Wilson, Mark Wiseman (Jefferson Lab)

RPPE062—The Use of Integrated Electronic Data Capture and Analysis for Accelerator Construction and Commissioning: Pansophy from the SNS Towards the ILC
Joseph Paul Ozelis, Valerie Bookwalter, Bonnie Madre, Charles E. Reece (Jefferson Lab)

RPPE063—Concepts for the JLab Ampere-Class CW Cryomodule
Robert Rimmer, Edward Daly (Jefferson Lab)

RPPE064—Development of a Cryogenic Radiation Detector for Mapping Radio Frequency Superconducting Cavity Field Emissions

Danny Wyane Dotson, John Mammosser (Jefferson Lab)

RPPE065—Beam Loss Ion Chamber System Upgrade for Experimental Halls

Danny Wyane Dotson, David Seidman (Jefferson Lab)

RPPE066—Development of SCRF Cryomodules at FNAL

Donald Mitchell, Evgueni Borissov, Helen Edwards, Timergali N. Khabibouline, Valeri Poloubotko, Nikolay Solyak (Fermilab)

RPPE067—Design and Fabrication of an FEL Injector Cryomodule

John Rathke, Anthony Ambrosio, Michael Cole, Ed Peterson, Tom Schultheiss (AES), Hans Bluem, Alan Murray Melville Todd (AES), Isidoro Enrico Campisi, Edward Daly, John Hogan, John Mammosser, George R. Neil, Joseph P. Preble, Robert Rimmer, Claus Rode, Timothy Whitlatch, Mark Wiseman (Jefferson Lab), Jacek Sekutowicz (on leave), Jacek Sekutowicz (Jefferson Lab; DESY)

RPPE068—A Magnetostrictive Tuning System for Particle Accelerators

Chiu-Ying Tai, Jordan Cormier, William Espinola, Zhixiu Han, Chad Joshi, Anil Mavanur, Livia Racz (Energen, Inc.), Kenneth Shepard (ANL), Edward Daly, Kirk Davis (Jefferson Lab)

RPPE069—Experimental Research of Multi-Stage Vacuum Insulator Stack Flashover Probability Analysis

Meng Wang (CAEP/IFP)

RPPE072—The Improvement and Data Acquisition Systems on Electrical Systems and Grounding Networks in NSRRC

Yung-Hui Liu, Jui-Chi Chang, June-Rong Chen, Yu-Chih Lin, Zong-Da Tsai (NSRRC)

RPPE073—An RF and Timing Distribution System for the International Linear Collider

Josef Frisch (SLAC)

RPPE074—The Multichannel Deflection Plates Control System for the ALF Facility at the APS

Boris Deriy (ANL)

RPPE075—Injector Electronics for Multi-Turn Operation of the University of Maryland Electron Ring (UMER)

Mike Holloway, Terry Godlove, Patrick G. O'Shea, Bryan Quinn, Martin Reiser (IREAP)

RPPE076—Overview of Electrical Systems for the University of Maryland Electron Ring (UMER)
Bryan Quinn, Gang Bai, Santiago Bernal, Terry Godlove, Irving Haber, Mike Holloway, Hui Li, Jonathan Gary Neumann, Patrick G. O'Shea, Martin Reiser, Kai Tian, Mark Walter (IREAP), John R. Harris (University of Maryland)

RPPE077—A Complete System for Operation of a Superconducting Magnet
Gerald Codner, Michael Comfort, Daniel Sabol, Theodore VanDerMark, Dwight Widger, Ronald Yaeger (CESR-LEPP)

Poster Session RPPP—Linear Colliders
Park Concourse, 13:50-17:10

RPPP001—Commissioning and First Measurements on the CTF3 Chicane

Andrea Ghigo, David Alesini, Gabriele Benedetti, Caterina Biscari, Michele Castellano, Alessandro Drago, Daniele Filippetto, Fabio Marcellini, Catia Milardi, Barbara Preger, Mario Serio, Francesco Sgamma, Angelo Stella, Mikhail Zobov (INFN/LNF), Roberto Corsini, Thibaut Lefevre, Frank Tecker (CERN)

RPPP002—RF Sources of Super-conducting Test Facility (STF) in KEK

Shigeki Fukuda, Hitoshi Hayano (KEK)

RPPP003—Proposal of the Next Incarnation of Accelerator Test Facility at KEK for the International Linear Collider

Hitoshi Hayano, Yasuo Higashi, Yosuke Honda, Kiyoshi Kubo, Masao Kuriki, Shigeru Kuroda, Mika Masuzawa, Toshiyuki Okugi, Ryuhei Sugahara, Takeshi Takahashi, Toshiaki Tauchi, Junji Urakawa, Vladimir Vogel, Hiroshi Yamaoka, Kaoru Yokoya (KEK), Boris Ivanovich Grishanov, Pavel Logachev, Fedor Podgorny, Valery Telnov (BINP SB RAS), Deepa Angal-Kalinin, Robert Appleby, James Jones, Alexander Kalinin (CCLRC/DL/ASTeC), Olivier Napol, Jacques Payet (CEA/DSM/DAPNIA), Hans-Heinrich Braun, Daniel Schulte, Frank Zimmermann (CERN), Yoshihisa Iwashita, Takanori Mihara (Kyoto ICR), Philip Bambade (LAL), Jeff Gronberg (LLNL), Masayuki Kumada (NIRS), Nicolas Delerue, Chafik Driouichi, Armin Reichold, David Urner (OXFORDphysics), Philip Burrows, Glenn Brian Christian, Stephen Molloy, Glen White (Queen Mary University of London), Ilya Agapov, Grahame A. Blair, John Carter (Royal Holloway, University of

London), Axel Brachmann, Thomas Himel, Thomas Markiewicz, Janice Nelson, Mauro Torino Francesco Pivi, Tor Raubenheimer, Marc Ross, Robert Ruland, Andrei Seryi, Cherrill M. Spencer, Peter Tenenbaum, Mark Woodley, Mike Woods (SLAC), Stewart Takashi Boogert, Stephen Malton (UCL), Eric Torrence (University of Oregon), Tomoyuki Sanuki (University of Tokyo)

RPPP004—Simulation Study of Low Emittance Tuning of ILC Damping Rings
Kiyoshi Kubo (KEK)

RPPP005—Simulation Study of a Dogbone Damping Ring
Yukiyoshi Ohnishi, Katsunobu Oide (KEK)

RPPP006—The PITZ Booster Cavity—A Prototype for the ILC Positron Injector Cavities
Valentin Paramonov, Leonid Vladimirovich Kravchuk (RAS/INR), Mikhail Krasilnikov, Frank Stephan (DESY Zeuthen), Klaus Floettmann (DESY)

RPPP007—CLIC Damping Ring Optics Design Studies
Maxim Korostelev, Frank Zimmermann (CERN)

RPPP008—The Short Circumference Damping Ring Design for the ILC
Maxim Korostelev, Frank Zimmermann (CERN), Kiyoshi Kubo, Masao Kuriki, Shigeru Kuroda, Takashi Naito, Junji Urakawa (KEK), Marc Ross (SLAC)

RPPP009—Luminosity Tuning Bumps in the CLIC Main Linac
Peder Eliasson, Daniel Schulte (CERN)

RPPP010—Considerations on the Design of the Decelerator of the CLIC Test Facility (CTF3)
Daniel Schulte, Igor Syratchev (CERN)

RPPP011—Different Options for Dispersion Free Steering in the CLIC Main Linac
Daniel Schulte (CERN)

RPPP012—Collective Effects in the CLIC Damping Rings
Frank Zimmermann, Maxim Korostelev, Daniel Schulte (CERN), Tomonori Agoh, Kaoru Yokoya (KEK)

RPPP013—Tests of the FONT3 Linear Collider Intra-Train Beam Feedback System at the ATF
Philip Burrows (Queen Mary University of London)

RPPP014—Multi-Bunch Simulations of the ILC for Luminosity Performance Studies

*Glen White (Queen Mary University of London),
Daniel Schulte (CERN), Nicholas John Walker
(DESY)*

RPPP015—Reconstruction of IP Beam Parameters at the ILC from Beamstrahlung

Glen White (Queen Mary University of London)

RPPP016—Vibration Studies in a Superconducting Quadrupole

Ping He, Sevan Aydin, John Escallier, George Ganetis, Michael Harrison, Animesh Kumar Jain, Wing Louie (BNL)

RPPP017—Compact Superconducting Final Focus Magnet Options for the ILC

Brett Parker, Michael Anerella, John Escallier, Michael Harrison, Ping He, Animesh Kumar Jain, Andrew Marone (BNL), Yuri Nosochkov, Andrei Seryi (SLAC)

RPPP018—An Energy Recovery Linear Collider?

Byung Chel Yunn (Jefferson Lab)

RPPP019—Revisiting the Cold ILC Parameters

Hasan Padamsee (Cornell University)

RPPP020—Linear Damping Systems for the International Linear Collider

Gerald Dugan (Cornell University)

RPPP021—Multivariate Optimization of ILC parameters

Ivan Vasilyevich Bazarov, Hasan Padamsee (Cornell University)

RPPP022—Combining Scheme for Reduction the Length of Undulator in Positron Production for ILC

Alexander A. Mikhailichenko (Cornell University)

RPPP023—A Compact Damping Ring Using RF Deflectors for the International Linear Collider

Richard W. Helms, David Rubin (Cornell University)

RPPP024—Comparison of Beam-Based Alignment Algorithms for the ILC

Jeffrey Claiborne Smith, Lawrence Gibbons, Ritchie Patterson, David Rubin, David Sagan (Cornell University), Peter Tenenbaum (SLAC)

RPPP025—CESR-c Wiggler Studies in the Context of the International Linear Collider Damping Rings

Jeremy Urban, Gerald Dugan (Cornell University)

RPPP026—Linear Accelerator Simulations with BMAD

Jeremy Urban, Laura Fields, David Sagan (Cornell University)

RPPP027—ILC Feedback Simulations with Diverse Timescales

Linda Hendrickson, Andrei Seryi, Peter Tenenbaum, Mark Woodley (SLAC), Daniel Schulte (CERN), Glen White (Queen Mary University of London)

RPPP028—Simulation of Wake Field Effects on High Energy Particle Beams

Roger John Barlow (SLAC), German Yu. Kourevlev, Adam Mercer (UMAN)

RPPP029—Analysis of Positron Collection in Linear Collider

Yuri Batygin (SLAC)

RPPP030—Design of the ILC Extraction Line for 20 mrad Crossing Angle

Yuri Nosochkov, Kenneth C. Moffeit, Andrei Seryi, Mike Woods (SLAC), Ray Arnold (University of Massachusetts), Eric Torrence (University of Oregon)

RPPP031—ILC Positron Production with Gammas from an FEL Powered by an Energy Recovery Linac

Rainer Pitthan (SLAC)

RPPP032—ILC Positron Production Based on an Undulator in the Main Positron Linac

Rainer Pitthan, Thomas Himel (SLAC)

RPPP033—Preservation of the Single-Bunch Emittance in the Main Linac of the International Linear Collider

Peter Tenenbaum, Mark Woodley (SLAC), Daniel Schulte (CERN), Nicholas John Walker (DESY), Andrzej Wolski (LBNL)

RPPP034—Two-Stage Bunch Compressor for the International Linear Collider

Peter Tenenbaum, Tor Raubenheimer (SLAC), Gerald Dugan (Cornell University), Andrzej Wolski (LBNL)

RPPP035—Machine Protection System Requirements and Architecture for the International Linear Collider Low Emittance Transport

Peter Tenenbaum, Marc Ross (SLAC)

RPPP036—A Test Facility for the International Linear Collider Using SLAC's End Station A for Prototypes of Beam Delivery and IR Components

Mike Woods, Roger Erickson, Josef Frisch, Lewis Keller, Thomas Markiewicz, Takashi Maruyama, Nan Phinney, Tor Raubenheimer, Marc Ross, Andrei Seryi, Peter Tenenbaum, Mark Woodley (SLAC), Deepa Angal-Kalinin, Frank Jackson, Alexander Kalinin (CCLRC/DL/ASTeC), Sean Walston (LLNL), Michael Hildreth (Notre Dame University), Philip Burrows, Glenn Brian Christian, Christine Clarke,

Anthony Francis Hartin, Stephen Molloy, Glen White (Queen Mary University of London), Yury Kolomensky (UCB), Stewart Takashi Boogert, Alexei Liapine, Stephen Malton, David John Miller, Matthew Wing (UCL, London), Mark Slater, Mark Thomson, David Ward (University of Cambridge), Ray Arnold (University of Massachusetts)

RPPP037—Analysis of Ions in the Interaction Region of a Multi-Bunch Collider
Juhao Wu, Daniel Aaron Bates, Arthur Chang, David Chen, Tor Raubenheimer (SLAC)

RPPP038—Multi-Bunch Electron-Cloud Effects in Transport Lines of a Normal Conducting Linear Collider
Juhao Wu, Daniel Aaron Bates, Arthur Chang, David Chen, Mauro Torino Francesco Pivi, Tor Raubenheimer, Andrei Seryi (SLAC)

RPPP039—Heat Deposition in Positron Sources for ILC
Vinod Bharadwaj, Yuri Batygin, Rainer Pitthan, David Schultz, John Sheppard, Heinz Vincke (SLAC)

RPPP040—Activation of Positron Source Elements in ILC
Vinod Bharadwaj, Yuri Batygin, Rainer Pitthan, David Schultz, John Sheppard, Heinz Vincke (SLAC)

RPPP041—A Proposed Fast Extraction and Tune-Up Dump Line Design for ILC
Mark Woodley, Andrei Seryi (SLAC), Brett Parker (BNL)

RPPP042—Emittance Dilution Due to Dipole Mode Rotation and Coupling in the Main Linacs of the ILC
Roger Michael Jones, Roger Heering Miller (SLAC)

RPPP043—Emittance Dilution Due to Many-Band Long-Range Dipole Wakefields in the International Linear Collider Main Linacs
Roger Michael Jones (SLAC), Nicoleta Baboi (DESY)

RPPP044—Studies of Room Temperature Accelerator Structures for the ILC Positron Source
Juwen W. Wang, Chris Adolphsen, Vinod Bharadwaj, Gordon B. Bowden, Jose Chan, Valery Dolgashev, Zenghai Li, Roger Heering Miller (SLAC)

RPPP045—Single-Bunch Instability Driven by an Electron Cloud Effect in the Positron Damping Ring of the International Linear Collider ILC
Mauro Torino Francesco Pivi, Tor Raubenheimer (SLAC), Frank Zimmermann (CERN), Rainer Wanzenberg (DESY), Kazuhito Ohmi (KEK), Andrzej Wolski (LBNL/AFR), Ali Feiz Ghalam (USC)

RPPP046—An L-Band Polarized Electron PWT Photoinjector for the ILC

David Yu, A. Baxter, Ping Chen, Martin Lundquist, Yan Luo, Alexei Smirnov, Jonathan Yu (DULY Research Inc.)

RPPP047—Global Optimization of Damping Ring Designs Using Parallel Simplex Optimizer

Louis Emery (ANL), Aimin Xiao (Fermilab)

RPPP048—Beam Collimation and Machine-Detector Interface at the International Linear Collider

Nikolai V. Mokhov, Alexandr I. Drozhdin, Mikhail A. Kostin (Fermilab)

RPPP049—Bunching for Shorter Damping Rings for the ILC

David Neuffer (Fermilab)

RPPP050—High-Frequency Bunching and Phase Rotation for Muon Collection

David Neuffer (Fermilab)

RPPP051—Characterization of a 6-km Damping Ring for the International Linear Collider

Aimin Xiao (Fermilab), Louis Emery (ANL)

RPPP052—Space-Charge Effects in the ILC Damping Rings

Marco Venturini, Ji Qiang, Andrzej Wolski (LBNL), Robert Ryne (LBNL/CBP)

RPPP053—Simulations of Resistive-Wall Instability in the ILC Damping Rings

Andrzej Wolski (LBNL/AFR), Daniel Aaron Bates (LBNL/CBP)

RPPP054—Achieving Large Dynamic Aperture in the ILC Damping Rings

Andrzej Wolski (LBNL/AFR), Yunhai Cai, Tor Raubenheimer (SLAC)

**Poster Session RPPT—Light Sources and Free-Electron Lasers;
Development in the South, East, and Mid-East; & Secondary
Beam Facilities: Neutrons, Muons, and Photons**
Meeting Room 200 A-C, 13:50-17:10

RPPT001—The BESSY Soft X-Ray FEL User Facility

Dieter Krämer (BESSY GmbH)

RPPT002—Harmonic Content of the BESSY FEL Radiation

Atoosa Meseck (BESSY GmbH)

RPPT003—Radiation Safety Aspects of the Euro-Pet Cyclotron

Klaus Ott (BESSY GmbH), Thorsten August, Leander Fluegel, Bruno Willi Simgen, Uta Steinhardt (Euro-Pet)

RPPT004—The Shielding Design of the BESSY FEL

Klaus Ott (BESSY GmbH)

RPPT005—Establishing a Collaborative Planning Procedure for the XFEL

Lars Hagge, Jochen Buerger (DESY)

RPPT006—Commissioning Experiences on TESLA Test Facility Phase 2 (TTF2) Bunch Compressor

Yujong Kim (DESY)

RPPT008—Experimental Measurements Based Injector Simulations for TTF2 Commissioning

Yujong Kim (DESY)

RPPT009—S2E Jitter Simulations with an Alternative Linac Layout for European XFEL

Yujong Kim, Klaus Floettmann, Torsten Limberg (DESY), Dongchul Son (CHEP)

RPPT010—Alternative Bunch Compressors for International Linear Collider (ILC) Project

Yujong Kim, Klaus Floettmann (DESY), Dongchul Son (CHEP)

RPPT011—Optimized Bunch Compression System for the European XFEL

Torsten Limberg, Vladimir Balandin, Reinhard Brinkmann, Winfried Decking, Martin Dohlus, Klaus Floettmann, Golubeva, Yujong Kim, Evgeny Schneidmiller (DESY)

RPPT012—Layout of the Diagnostic Section for the European XFEL

Holger Schlarb, Michael Roehrs (DESY), Christopher Gerth (CCLRC/DL/ASTeC)

RPPT013—Status of the SPARC Project

Luca Serafini, Franco Alessandria, Alberto Bacci, Simone Cialdi, Carlo De Martinis, Dario Giove, Marco Mauri, Massimiliano Romé (INFN-Milano), Franco Ciocci, Giuseppe Dattoli, Antonio Dipace, Andrea Doria, F. Flora, Gian Piero Gallerano, Luca Giannessi, Emilio Giovenale, Giovanni A. Messina, P.L. Ottaviani, Simonetta Pagnutti, Giovanni Parisi, Luigi Picardi, Marcello Quattromini, Alberto Renieri, Concetta Ronsivalle, Maurizio Rosetti, Elio Sabia, Mauro Sassi, A Torre, Alberto Zucchini (ENEA C.R. Frascati), Luciano Catani, Enrica Chiadroni, Alessandro Cianchi, Carlo Schaerf, Sergio Tazzari (INFN-Roma II), Massimo Petrарca (INFN-Roma), Francesco Broggi (INFN/LASA), David Alesini, Marco Bellaveglia, Sergio Bertolucci, Maria Biagini, Roberto Boni, Manuela Boscolo, Michele Castellano, Alberto Clozza, Giampiero Di Pirro, Alessandro Drago, Adolfo Esposito, Massimo Ferrario, Daniele Filippetto, Valeria Fusco, Alessandro Gallo, Andrea Ghigo, Susanna Guiducci, Maurizio Incurvati, Carlo Ligi, Fabio Marcellini, Mauro Migliorati, Luigi Palumbo, Luigi Pellegrino, Miro Preger, Ruggero Ricci, Claudio Sanelli, Mario Serio, Francesco Sgamma, Bruno Spataro, Alessandro Stecchi, Angelo Stella, Franco Tazzioli, Cristina Vaccarezza, Mario Vescovi, Carlo Vicario (INFN/LNF), Sandro de Silvestri, Mauro Nisoli, Salvatore Stagira (Politecnico/Milano), Andrea Mostacci (Rome University La Sapienza), David Dowell, Paul Emma, Cecile Limborg-Deprey, Dennis Thomas Palmer (SLAC), James Rosenzweig (UCLA), Ilario Boscolo, Cesare Maroli, Vittorio Petrillo (Universita' degli Studi di Milano), Decio Levi, Mario Mattioli, G. Medici, Pietro Musumeci, Daniele Pelliccia (Università di Roma I La Sapienza)

RPPT014—Design and RF Measurements Results of a X-Band Structure for a Longitudinal Emittance Correction at SPARC

David Alesini, Bruno Spataro (INFN/LNF), Alberto Bacci (INFN/LASA), Antonio Falone, Mauro Migliorati, Andrea Mostacci, Luigi Palumbo (Rome University La Sapienza,)

RPPT015—Start To End Simulations for the SPARX Project

Cristina Vaccarezza, Manuela Boscolo, Massimo Ferrario, Valeria Fusco, Mauro Migliorati, Luigi Palumbo, Bruno Spataro (INFN/LNF), Luca Giannessi, Marcello Quattromini, Concetta Ronsivalle (ENEA C.R. Frascati), Luca Serafini (INFN-Milano)

RPPT016—Effects of S-Band Linac Wakefield on the Microbunching Instabilities at PAL-XFELs
Eun-San Kim (PAL)

RPPT017—Wake Field Effect on the SASE Performance of PAL XFEL
Jong-Seok Oh, In Soo Ko, Tae-Yeon Lee, Won Namkung (PAL)

RPPT018—On Possibility of Detecting Wakefield Undulator Radiation
Anatoliy Opanasenko (NSC/KIPT)

RPPT019—Start to End Simulations of the ERL Prototype at Daresbury Laboratory
Christopher Gerth, Marion Bowler, Bruno Muratori, Hywel Owen, Neil Thompson (CCLRC/DL/ASTeC), Brian W.J. McNeil (Strathclyde University)

RPPT020—Space Charge Effects for the ERL Prototype at Daresbury Laboratory
Bruno Muratori, Christopher Gerth, Hywel Owen (CCLRC/DL/ASTeC)

RPPT021—Inducing Strong Density Modulation with Small Energy Dispersion in Particle Beams
Brian W.J. McNeil, Gordon Robb (Strathclyde University), Michael W. Poole (CCLRC/DL/ASTeC)

RPPT022—Optics for High Brightness and High Current ERL Project at BNL
Dmitry Kayran, Ilan Ben-Zvi, Xiangyun Chang, Jorg Kewisch, Vladimir N. Litvinenko (BNL)

RPPT023—A Proposal for a One Micron High Gain Transverse Optical Klystron Amplifier Free Electron Laser at SDL of BNL Lab
Li-Hua Yu (BNL/NSLS)

RPPT024—Doubling the Intensity of an ERL Based Light Source
Andrew Hutton (Jefferson Lab)

RPPT025—Beam Conditioning and FEL Studies Using MAD and Genesis
Yury Vinokurov, Gregory Penn, Jonathan Wurtele (LBNL/CBP), Eric Esarey, Andrew Sessler, Andrzej Wolski (LBNL)

RPPT026—Status of a Plan for an ERL Extension to CESR
Georg Hoffstaetter, Ivan Vasilyevich Bazarov, Sergey Belomestnykh, Donald Heywood Bilderback, Michael Billing, Joseph Sung-Hwoon Choi, Zipi Greenwald, Sol Michael Gruner, Yulin Li, Matthias Liepe, Hasan Padamsee, David Sagan, Charles Kent Sinclair, Karl William Smolenski, Changsheng Song, Richard Michael Talman, Maury Tigner (Cornell University)

RPPT027—A Scheme to Precisely Control the Arrival Timing of Electron Bunches to 10s fs Level for X-Ray FEL

Dong Wang (MIT)

RPPT028—Free-Electron Lasers with Slowly-Varying Beam and Undulator Parameters

Zhirong Huang, Gennady Stupakov (SLAC)

RPPT029—Spectrometers for the LCLS Photoinjector Beamline

Cecile Limborg-Deprey, David Dowell, Paul Emma, Stephen Gierman, John Schmerge (SLAC)

RPPT030—Alternate Tunings for the LCLS Photoinjector

Cecile Limborg-Deprey, David Dowell, Paul Emma, Stephen Gierman (SLAC)

RPPT031—Recent Results from and Future Plans for the VISA II SASE FEL

Gerard Andonian, Ronald Agustsson, Pedro Frigola, Alex Murokh, Claudio Pellegrini, Sven Reiche, James Rosenzweig, Gil Travish (UCLA), Marcus Babzien, Ilan Ben-Zvi, Vladimir N. Litvinenko, Vitaly Yakimenko (BNL), Ilario Boscolo, Simone Cialdi, Alessandro Federico Flacco (INFN-Milano), Massimo Ferrario, Luigi Palumbo, Carlo Vicario (INFN/LNF), Jung Yun Huang (PALg)

RPPT032—High Current Energy Recovery Linac at BNL

Vladimir N. Litvinenko, Donald Barton, Dana Beavis, Ilan Ben-Zvi, Michael Blaskiewicz, Joseph Michael Brennan, Andrew Burrill, Rama Calaga, Peter Cameron, Xiangyun Chang, Roger Connolly, David Mark Gassner, Harald Hahn, Ady Hershcovitch, Hsiao-Chaun Hseuh, Peter Johnson, Dmitry Kayran, Jorg Kewisch, Robert Lambiase, Gary McIntyre, Wuzheng Meng, Thomas Nehring, Tony Nicoletti, David Pate, Jim Rank, Triveni Rao, Thomas Roser, Thomas Russo, Joseph Scaduto, Kevin Smith, Neville Willaims, Kuo-Chen Wu, Vitaly Yakimenko, Kin Yip, Alex Zaltsman, Yongxiang Zhao (BNL), Al Burger, Anthony Favale, Douglas Holmes (AES), Hans Bluem, Michael Cole, John Rathke, Tom Schultheiss, Alan Murray Melville Todd (AES), Jean Roger Delayen, Larry Phillips, Joseph P. Preble (Jefferson Lab)

RPPT033—Potential Use of eRHIC's 10-to-20 GeV ERL for FELs and Light Sources

Vladimir N. Litvinenko, Ilan Ben-Zvi (BNL)

RPPT034—High-Resolution Differential Measurements of Undulator Effective K-Parameter Using Spontaneous Undulator Radiation

Bingxin Yang (ANL)

RPPT035—Optimization of the LCLS X-Ray FEL Output Performance in the Presence of Strong Undulator Wakefields

Sven Reiche (UCLA), William M. Fawley (LBNL), Karl Leopold Freitag Bane, Paul Emma, Zhirong Huang, Heinz-Dieter Nuhn, Gennady Stupakov (SLAC)

RPPT036—200 MeV Linac Upgrade for FEL
Yingui Zhou, Sai Dong, Ge Li (USTC/NSRL)

RPPT037—Technique for the Generation of Attosecond X-Ray Pulses Using an FEL
Gregory Penn (LBNL/CBP), Alexander Zholents (LBNL/AFR)

RPPT038—Phase Noise Characteristics of Fiber Lasers as Potential Ultra-Stable Master Oscillators
Axel Winter, Peter Schmüser (Uni HH), Holger Schlarb (DESY), Jeff Chen, Fatih Oemer Ilday, Franz Xaver Kaertner (MIT)

RPPT039—Stabilized Optical Fiber Links for the XFEL
Axel Winter (Uni HH), Holger Schlarb, Bernhard Schmidt (DESY), Jeff Chen, Felix Jan Grawert, Fatih Oemer Ilday, Franz Xaver Kaertner (MIT)

RPPT040—Weak FEL Gain Detection with a Modulated Laser-Based Beam Heater
Paul Emma, Zhirong Huang, Juhao Wu (SLAC)

RPPT041—Ground Motion Expectations for the LCLS Undulator Hall
James Welch (SLAC)

RPPT042—Beam Acceleration and Undulator Characterization in the CUTE-FEL Project
Kamal Kumar Pant, Bhaskar Biswas, Pratima Jain, Umesh Kale, Srinivas Krishnagopal, Arvind Kumar, Vinit Kumar, Shankar Lal, Pravin Nerpagar, Rohin Parkar (CAT)

RPPT043—Commissioning of the Main Magnet of Kolkata K-500 Superconducting Cyclotron
Rakesh Kumar Bhandari, Bikash Sinha (DAE/VECC)

RPPT044—Design, Construction and Commissioning of a NEG Coated Wiggler Vacuum Chamber for the LNLS Storage Ring
Marcelo Juni Ferreira, Reginaldo de Oliveira Ferraz, Helio Gazetta Filho, Milton Batista Silva (LNLS)

RPPT045—Calibration of Beam Position Monitor for HLS LINAC and Transfer Line
Ji-Hao Li, Yong Cao, Duohui He, Ping Lu, Baogen Sun (USTC/NSRL)

RPPT046—Bunch-by-Bunch Measurement System of HLS

Jian Hong Liu, Baogen Sun, Jun Hua Wang, Yong Liang Yang, Kai Zheng (USTC/NSRL)

RPPT047—Development of Measurement and Transverse Feedback System at HLS

Jun Hua Wang, Weimin Li, Jian Hong Liu, Zuping Liu, Baogen Sun, Yong Liang Yang, Kai Zheng (USTC/NSRL)

RPPT048—Turn-By-Turn System of HLS and Its Application

Jun Hua Wang, Weimin Li, Jian Hong Liu, Zuping Liu, Baogen Sun, Yong Liang Yang, Kai Zheng (USTC/NSRL)

RPPT049—Linear Optics Compensation of the Insertion Devices in HLS Storage Ring

Lin Wang (USTC/NSRL)

RPPT050—The Measurement of Tune and Phase Space at HLS

Yong Liang Yang, Jian Hong Liu, Zuping Liu, Baogen Sun, Jun Hua Wang, Kai Zheng (USTC/NSRL)

RPPT051—Electron Demonstration Model of Nonscaling FFAG with 1.3 GHz RF

Shane Rupert Koscielniak (TRIUMF), Carol Johnstone (Fermilab)

RPPT052—Electron Model Nonscaling FFAG—Analysis of Betatron Resonance Crossing

Shane Rupert Koscielniak, Rick Baartman (TRIUMF)

RPPT053—Studies of the Injection System in the Decay Ring of Beta-Beam Neutrino Source Project

Jacques Payet, ANTOINE CHANCE (CEA/CEN)

RPPT054—First Radioactive Ion Beam Production at the EXCYT Facility

Giacomo Cuttone, Luciano Calabretta, Luigi Celona, Luigi Cosentino, Paolo Finocchiaro, Donatella Garufi, Mariano Menna, Guido Raia, Maurizio Re, Danilo Rifuggiato, Alberto Rovelli, Gaetano Schillaci (INFN/LNS)

RPPT055—FFAG Accelerator Based Neutron Source with ERIT

Reiko Taki (GUAS/AS), Yoshiharu Mori (KEK)

RPPT056—A Proposal of the Chinese Spallation Neutron Source

Shouxian Fang (IHEP Beijing)

RPPT057—Tracking Optimisation of a 6D Neutrino Factory Muon Cooling Ring
Stephen Brooks (CCLRC/RAL/ASTeC)

RPPT058—Kaon Monitoring Using the MiniBooNE Little Muon Counter
Terrence Lee Hart (Colorado University at Boulder)

RPPT059—Spectrum from the Proposed BNL Very Long Baseline Neutrino Facility
Stephen Alan Kahn, Milind Diwan (BNL)

RPPT060—The MuCool Test Area at Fermilab
Carol Johnstone (Fermilab)

RPPT061—Linear Quadrupole Cooling Channel for a Neutrino Factory
Carol Johnstone (Fermilab), Martin Berz, Kyoko Makino (MSU), Debbie Errede (University of Illinois)

RPPT062—Radiation Simulations for the Proposed ISOL Stations for RIA
Reginald Ronningen, Valetin Blideanu, Georg Bollen, Don Lawton, Paul Mantica, David Morrissey, Bradley Sherrill, Al Zeller (NSCL), Todd Bredeweg, David Vieira (LANL), Francois M. Nortier (LANL/LANSCE), Lawrence Heilbronn (LBNL), Larry Ahle, Jason Boles, Susana Reyes, Werner Stein (LNL), James R. Beene, Thomas Burgess, Ken Carter, David Conner, Tony Gabriel, Louis Mansur, Igor Remec, Mark Rennich, Dan Stracener, Mark Wendel (ORNL), Pierre Bricault (TRIUMF)

RPPT063—Radiation Simulations and Development of Concepts for High Power Beam Dumps, Catchers and Pre-separator Area Layouts for the Fragment Separators for RIA

Reginald Ronningen, Valetin Blideanu, Don Lawton, David Morrissey, Bradley Sherrill, Al Zeller (NSCL), Itacil Chiari Gomes, Anthony Levand, Yoichi Momozaki, Jerry Nolen, Claude Reed (ANL), Hans Geissel, Hiroshi Iwase (GSI), Lawrence Heilbronn (LBNL), Larry Ahle, Jason Boles, Susana Reyes, Werner Stein, Mark Stoyer (LNL), Georg Bollen (MSU), James R. Beene, Thomas Burgess, Ken Carter, David Conner, Tony Gabriel, Louis Mansur, Igor Remec, Mark Rennich, Dan Stracener, Mark Wendel (ORNL)

RPPT064—Holifield Radioactive Ion Beam Facility Development and Status
Alan Tatum, James R. Beene (ORNL)

RPPT065—Beam Loss Estimates and Control for the BNL Neutrino Facility
Wu-Tsung Weng, Yong Yung Lee, Deepak Raparia, Nicholaos Tsoupas, Jie Wei, S.Y. Zhang (BNL)

RPPT066—Electromigration Issues in High Current Horn

Wu Zhang, Steven Bellavia, Jon Sandberg, Nikolaos Simos, Joseph Tuozzolo, Wu-Tsung Weng (BNL), Brigitte Hseuh (JHU)

RPPT067—A High-Power Target Experiment
Harold G Kirk (BNL), Kirk T. McDonald (PU)

RPPT068—Pion-Muon Concentrating System for Detectors of Highly Enriched Uranium

Sergey Kurennoy, Barbara Blind, Filippo Neri, Andrew John Jason (LANL)

RPPT069—The Installation Status of the SNS Accumulator Ring

Michael Hechler (ORNL/SNS), William J. McGahern (on leave) (BNL)

RPPT070—Status Report on the Installation of the Warm Sections for the Superconducting Linac at the SNS

Roberto Kersevan, Dayrl P. Briggs, Isidoro Enrico Campisi, John A. Crandall, Debra L. Douglas, Ted Hunter, Peter Ladd, Chris Luck, Robert C. Morton, Kathy S. Russell, Daniel Stout (ORNL/SNS)

RPPT071—Installation of the Spallation Neutron Source (SNS) Superconducting Linac

Daniel Stout, Isidoro Enrico Campisi, Fabio Casagrande, Roy I. Cutler, Matthew Howell, Ted Hunter, Roberto Kersevan, Peter Ladd, William Strong (ORNL/SNS)

RPPT072—Ion Chamber Arrays To Monitor the NuMI Beam Facility at Fermilab

Sacha Elmer Kopp, Dharmaraj Indurthy, Ryan Keisler, Zarko Pavlovich, Marek Proga, Robert Miles Zwaska (The University of Texas at Austin), Mary Bishai, Brett Viren (BNL), Debbie Harris (Fermilab), Albert Erwin, Christos Velissaris (UW-Madison/PD)

RPPT073—Design and Expected Performance of the Muon Beamline for the Muon Ionisation Cooling Experiment

Kevin Tilley (CCLRC/RAL/ISIS), Thomas Roberts (Muons, Inc), Kenny Andrew Walaron (University of Glasgow)

RPPT074—Beam Characterizations at Femtosecond Electron Beam Facility

Sakhorn Rimjaem, Vitoon Jinamoon, Keerati Kusoljariyakul, Jatuporn Saisut, Chitrlada Thongbai, Thiraphat Vilaithong (FNRF), Michael W. Rhodes, Pathom Wichaisirimongkol (IST), Helmut Wiedemann (SLAC)

RPPT075—Generation of Femtosecond Electron and Photon Pulses

Chitrlada Thongbai, Vitoon Jinamoon, Keerati Kusoljariyakul, Sakhorn Rimjaem, Jatuporn Saisut, Thiraphat Vilaithong (FNRF), Michael W. Rhodes, Pathom Wichaisirimongkol (IST), Helmut Wiedemann (SLAC)

Oral Session FOAA—Accelerator Technology
Ballroom A @ 8:30
Chair: J. Kelley (LANL)

8:30 FOAA001—New Technology in Hydrogen Absorbers for Muon Cooling Channels
Mary Anne Clare Cummings (Fermilab)

8:55 FOAA002—Technological Improvements in the DARHT II Accelerator Cells
Benjamin Arnold Prichard (SAIC), Thomas E. Genoni, Thomas P. Hughes (ATK-MR), Juan Barraza, Mike Kang, Kurt Nielsen (LANL), Frank Bieniosek, Ken Chow, William M. Fawley, Lou Reginato, William Waldron (LBNL), Richard J. Briggs (SAIC)

9:20 FOAA003—HOM Effects in Vacuum System with Short Bunches
Alexander Novokhatski (SLAC)

9:45 FOAA004—TBD

10:00 FOAA005—Mechanical Vibration Measurements on TTF Cryomodules
Angelo Bosotti, Carlo Pagani, Paolo Pierini (INFN/LASA), Rolf Lange (DESY), Raffaele De Monte, Mario Ferianis (ELETTRA)

Oral Session FOAB—Application of Accelerators
Ballroom B @ 8:30
Chair: R. Sah (Siemens Medical Solutions, USA)

8:30 FOAB001—Compact Neutron Generators for Medical, Home Land Security, and Planetary Exploration
Jani Reijonen (LBNL/AFR)

8:55 FOAB002—Advances in X-Band and S-Band Linear Accelerators for Medical, Security, NDT Applications
Andrey Valentinovich Mishin (AS&E)

9:20 FOAB003—Recent Developments in Hadron Therapy Accelerators
Hans-Udo Klein (ACCEL)

9:45 FOAB004—Construction of FFAG Accelerators in KURRI for ADS Study

Minoru Tanigaki, Kaichiro Mishima, Seiji Shiroya (KURRI), Shinji Machida, Yoshiharu Mori (KEK), Shintaro Fukumoto, Yoshihiro Ishi (Mitsubishi Electric Corp), Makoto Inoue (SLLS)

10:00 FOAB005—Technology for Fissionable Materials Detection by Use of 100 MeV Variable Linac

Sergey Petrovich Karasyov, Anatoliy Nikolajevich Dovbnja, Nikolay Mikhajlovich Kiryukhin, Yuryi Petrovich Melnik (NSC/KIPT), Sergiy Viktorovich Trubnikov (KhNU)

Oral Session FOAC—Secondary Beam Facilities: Neutrons, Muons, and Neutrinos, Ballroom C @ 8:30

Chair: C. Moore (FNAL)

8:30 FOAC001—High Intensity Muon Beam Facilities with FFAG

Yoshitaka Kuno (Osaka University)

8:55 FOAC002—Status of Neutrino Factory Design and R&D

Derun Li (LBNL/AFR)

9:20 FOAC003—New Concepts in FFAG Design for Secondary Beam Facilities and Other Applications

Michael Craddock (UBC & TRIUMF)

9:45 FOAC004—Status of the NuMI Neutrino Beam Facility at Fermilab

Sacha Elmer Kopp (Univ. of Texas at Austin)

10:00 FOAC005—Reliability and Availability Studies in the RIA Linac Driver

Eliane Schnirman Lessner, Peter Ostromov (ANL)

Oral Session FOAA (Cont.)—Accelerator Technology
Ballroom A @ 10:40
Chair: W. Oren (JLab)

10:40 FOAA006—Digital Low-Level RF Controls for Future Superconducting Linear Colliders
Stefan Simrock (DESY)

11:05 FOAA007—Cryomodule Design Concepts and Operating Experience
Claus Rode, Joseph P. Preble (Jefferson Lab)

11:30 FOAA008—Superconducting RF Development at Nuclear Science Centre
Amit Roy (NSC)

11:55 FOAA009—SRF Performance of CEBAF After Thermal Cycle to Ambient Temperature
Robert Rimmer, Jay Benesch, Joseph P. Preble, Charles E. Reece (Jefferson Lab)

12:10 FOAA010—Full Characterization at Low Temperature of Piezoelectric Actuators Used for SRF Cavities Active Tuning
Mohammed Fouaidy, Sebastien Blivet, Nourredine Hammoudi, Guillaume Martinet (IPN)

Oral Session FOAB (Cont.)—Application of Accelerators
Ballroom B @ 10:40
Chair: A. Todd (AES)

10:40 FOAB006—Industrial Applications of High Average Power FELS
Michelle Diane Shinn (Jefferson Lab)

11:05 FOAB007—The Compact Light Source: A Miniature Synchrotron Light Source
Ronald Ruth (Lyncean Technologies, Inc.)

11:30 FOAB008—Muon Radiography
Christopher Morris (LANL)

11:55 FOAB009—The Frankfurt Funneling Experiment
Jan Thibus, Ulrich Bartz, Norbert Mueller, Alwin Schempp, Holger Zimmermann (IAP)

12:10 FOAB010—Present Status of Photo-Cathode RF Gun System and Its Applications

Ryunosuke Kuroda, Yoshimasa Hama, Kentaro Hidume, Masaaki Kawaguchi, Ryo Moriyama, Taku Saito, Kazuyuki Sakaue, Masakazu Washio (RISE), Shigeru Kashiwagi (ISIR), Hitoshi Hayano, Junji Urakawa (KEK)

Oral Session FOAD—Extreme Beams

Ballroom C @ 10:40

Chair: I. Ben-Zvi (BNL)

10:40 FOAD001—Frozen Beams

Hiromi Okamoto (HU/AdSM)

11:05 FOAD002—Ultra-High Density Electron Beams for Beam Radiation and Beam Plasma Interaction

Scott Anderson, Winthrop Brown, David Jeremy Gibson, Fred V. Hartemann, Jeremy Scott Jacob, Aaron Matthew Tremaine (LLNL), Pietro Musumeci (INFN-Roma), Pedro Frigola, Jae Lim, James Rosenzweig, Gil Travish (UCLA)

11:30 FOAD003—Laboratory Astrophysics Using High Energy Density Photon and Electron Beams

Robert Bingham (CCLRC/RAL/ASTeC)

11:55 FOAD004—Laser Cooling of Relativistic Heavy Ion Beams

Ulrich Schramm, Michael Bussmann, Dietrich Habs (LMU), Karl Beckert, Peter Beller, Bernhard Franzke, Fritz Nolden, Markus Steck (GSI), Sergej Karpuk (Johannes Gutenberg University Mainz), Sascha Reinhardt, Guido Saathoff (MPI-K)

12:10 FOAD005—Commissioning of the University of Maryland Electron Ring (UMER)

Santiago Bernal, Gang Bai, Donald Feldman, Terry Godlove, Irving Haber, Mike Holloway, Rami Alfred Kishek, Jonathan Gary Neumann, Patrick G. O'Shea, Bryan Quinn, Kai Tian, Jayakar Charles Tobin Thangaraj, Mark Walter (IREAP), Martin Reiser (University Maryland), Renee Feldman, John R. Harris (University of Maryland)

**Poster Session FPAE—Low- and Medium-Energy
Accelerators and Rings
Ballroom E, 8:30-12:20**

FPAE001—Design Work for the High-Energy Storage Ring for Antiprotons of the Future GSI Project

Andreas Lehrach, Klaus Bongardt, Ralf Eichhorn, Rudolf Maier, Siegfried Martin, Dieter Prasuhn, Yurij Senichev, Hans Stockhorst, Raimund Tölle, Evgeny Zaplatin (FZJ/IKP), Markus Steck (GSI), Dag Reistad (TSL)

FPAE002—Design of Injection and Extraction Systems of the 3-GeV Rapid Cycle Synchrotron in the J-PARC

Taihei Shimada, Seiji Hiroki, Yoshiro Irie, Junichiro Kamiya, Michikazu Kinsho, Fumiaki Noda, Tomohiro Takayanagi, Yuzou Teruyama, Masao Watanabe (JAERI/J-PARC), Yoshio Arakida, Tadamichi Kawakubo, Izumi Sakai (KEK)

FPAE003—Status of the Rapid Cycling Synchrotron for J-PARC
Hiromitsu Suzuki (JAERI/J-PARC)

FPAE004—Optical Matching of Slowly Extracted Beam with Transport System at HIMAC

Takuji Funukawa, Takuya Naruse, Koji Noda, Masami Torikoshi, Takehiro Uesugi (NIRS), Tetsuya Fujimoto, Shinji Shibuya (AEC)

FPAE005—Characteristics of Injected Beam at HIMAC Synchrotron

Takehiro Uesugi, Takuji Funukawa, Koji Noda (NIRS), Takuya Naruse (Seikei University)

FPAE006—Optimization of AGS Polarized Proton Operation with the Warm Helical Snake

Junpei Takano, Masahiro Okamura (RIKEN), Leif Ahrens, Mei Bai, Joseph Glenn, Haixin Huang, Alfredo U. Luccio, William W. MacKay, Thomas Roser (BNL), Toshiyuki Hattori (RLNR)

FPAE007—A Project of the 2.5 GeV Booster-Synchrotron in BINP

Vasily Kvardakov, V. Barashin, Vladimir Kiselev, Elena Kremyanskaya, Evgeny Levichev, Svyatoslav Mishnev, Victor Petrov, Alexander Skrinsky, Victor Smaluk, Ilya Zemlyansky (BINP SB RAS)

FPAE008—Iso-Adiabatic Merging of Two pbar
Stacks in the Recycler: Simulations and Beam
Studies

Chandra Bhat (Fermilab)

FPAE009—Bunched Beam Cooling in the Fermilab
Recycler

*David Neuffer, Daniel Robert Broemmelsiek, Alexey
Burov, Sergei Nagaitsev (Fermilab)*

FPAE010—Beam Stacking in the Main Injector
Using Barrier RF

*Weiren Chou, David Wildman (Fermilab), Hai Zheng
(CALTECH), Akira Takagi (KEK)*

FPAE011—8 GeV H- Ions—Transport, Stripping and
Injection

*Weiren Chou, Alexandr I. Drozhdin, Chris Hill,
Mikhail A. Kostin, Jean-Francois Ostiguy, Zhijing
Tang (Fermilab), Grahame Rees (CCLRC/RAL/
ASTeC), Robert James Macek (LANL/LANSCE), Phil
Sung Yoon (Rochester University), Howard C. Bryant
(UNM)*

FPAE012—Experimental Test of a New Antiproton
Acceleration Scheme in the Fermilab Main Injector

*Vincent Wu, Chandra Bhat, Brian Chase, Joseph
Dey, Keith G. Meisner (Fermilab)*

FPAE013—The Calculation of Orbit Length Change
of the Recycler Due to Main Injector Ramp

Meiqin Xiao (Fermilab)

FPAE014—Acceleration of Polarized Protons in the
AGS with Two Helical Partial Snakes

*Haixin Huang, Leif Ahrens, Mei Bai, Alexendro
Bravar, Kevin A. Brown, Gerry Bunce, Ernest D.
Courant, Chris J. Gardner, Joseph Glenn, Ramesh C.
Gupta, Alfredo U. Luccio, William W. MacKay,
Christoph Montag, Jinnouchi Osamu, Vadim Ptitsyn,
Thomas Roser, Steven Tepikian, Nicholaos Tsoupas,
Erich Willen, Anatoli Zelenski, Keith Zeno (BNL),
Hal Spinka, David Underwood (ANL), Igor
Gennadievich Alekseev, Dima Svirida (ITEP), Junpei
Takano (RIKEN), Masahiro Okamura (RIKEN/
RARF/CC), Jeff Wood (UCLA)*

FPAE015—CW Mode of Operation of a Proton
FFAG Accelerator

Alessandro Ruggiero (BNL)

FPAE016—A Summary on the Construction of the
Spallation Neutron Source Ring

Jie Wei (BNL)

FPAE017—Observation of Longitudinal Diffusion Due to Intra-Beam Scattering at the Fermilab Recycler Ring

Martin Hu, Sergei Nagaitsev (Fermilab)

FPAE018—Performance of the Fermilab Booster Synchrotron with a New Extraction System

James Lackey, Weiren Chou, Alexandr I. Drozhdin, William Pellico, Eric Prebys (Fermilab)

FPAE019—Booster 6-GeV Study

Xi Yang, Charles Ankenbrandt, James Lackey, William Pellico (Fermilab)

FPAE020—Induction Acceleration of a Single RF Bunch in the KEK PS

Ken Takayama, Dai Arakawa, Yoshio Arakida, Susumu Igarashi, Taiki Iwashita, Tadaaki Kono, Eiji Nakamura, Makoto Sakuda, Hikaru Sato, Yoshito Shimosaki, Masashi Shirakata, Tsuyoshi Sueno, Kota Torikai, Takeshi Toyama, Masayoshi Wake, Isao Yamane (KEK), Kunio Koseki (GUAS/AS), Masao Watanabe (JAERI/J-PARC), Junichi Kishiro (JAERI/LINAC), Makoto Shiho (JAERI/NAKA), Atsushi Kawasaki, Akira Tokuchi (NICHICON), Kazuhiko Horioka, Mitsuo Nakajima (TIT)

FPAE021—Alignment and Steering for Injection and Multi-Turn Operation of the University of Maryland Electron Ring (UMER)

Mark Walter, Gang Bai, Santiago Bernal, Irving Haber, Mike Holloway, Rami Alfred Kishek, Patrick G. O’Shea, Bryan Quinn (IREAP), Martin Reiser (University Maryland)

FPAE022—Cycle-to-Cycle Extraction Synchronization of the Fermilab Booster for Multiple Batch Injection to the Main Injector

Robert Miles Zwaska, Sacha Elmer Kopp (The University of Texas at Austin), William Pellico (Fermilab)

FPAE023—Direct Antiproton Deceleration in the Fermilab Proton Driver

Gerald Peter Jackson, Steven Howe (Hbar Technologies, LLC)

FPAE024—Studies Performed in Preparation for the Spallation Neutron Source Accumulator Ring Commissioning

Sarah M. Cousineau (ORNL/ASD), Viatcheslav V. Danilov, Stuart Henderson, Jeffrey Alan Holmes, Michael Plum (ORNL/SNS)

FPAE025—Study of Slow Beam Extraction Through the Third Order Resonance with Transverse Phase Space Manipulation by a Mono-Frequency RFKO

Atsushi Miyamoto, Hiroyuki Hama, Fujio Hinode,

*Masayuki Kawai, Katsuhiro Shinto, Takumi Tanaka
(LNS)*

FPAE026—Development of FFAG Accelerator at KEK

*Yujiro Yonemura, Nobuo Ikeda, Masaru Matoba
(Kyushu University,), Shinji Machida, Yoshiharu
Mori, Atsutoshi Muto, Joe Nakano, Chihiro Ohmori,
Izumi Sakai, Yasuo Sato, Akira Takagi, Takeichiro
Yokoi, Masahito Yoshii, Masahiro Yoshimoto,
Yoshimasa Yuasa (KEK), Akiyoshi Yamazaki (LNS),
Tomonori Uesugi (NIRS), Masamitsu Aiba, Masahiro
Sugaya (University of Tokyo)*

FPAE027—Status of the ISAC-II Accelerator at TRIUMF

*Robert Edward Laxdal, Willy Andersson, Pierre
Bricault, Iouri Bylinskii, Ken Fong, Marco
Marchetto, Amiya Kumar Mitra, Roger Luke Poirier,
William Reginald Rawnsley, Paul Schmor, Igor
Sekachev, Guy Stanford, Glen Stinson, Vladimir
Zviagintsev (TRIUMF)*

FPAE028—The Design of the High Intensity Exotic Beams SPIRAL 2 Project

*Alban Mosnier (CEA/DSM/DAPNIA), M.H.
Moscatello (GANIL)*

FPAE029—Setup and Performance of the RHIC Injector Accelerators for the 2005 Run with Copper Ions

*Chris J. Gardner, James Alessi, John Benjamin,
Michael Blaskiewicz, Joseph Michael Brennan, Kevin
A. Brown, Charles Carlson, Joseph DeLong, Joseph
Glenn, Thomas Hayes, William W. MacKay, Gregory
James Marr, John Morris, Thomas Roser, Freddy
Severino, Kevin Smith, Dannie Steski, Nicholaos
Tsoupas, Alex Zaltsman, Keith Zeno (BNL)*

FPAE030—Cost Comparison of 8 GeV Proton Drivers Based on a Superconducting Linac and Fast-Cycling Synchrotron

*G. William Foster, Weiren Chou, Fernanda
Gallinucci Garcia, David J. Harding, Cezary Jach,
Elaine McCluskey, Jean-Francois Ostiguy, Richard
Stanek (Fermilab)*

FPAE031—Nuclear Physics with Polarized Electron Beams at the MIT Bates Accelerator Center
Townsend Zwart (MIT)

FPAE032—ORIC Beam Energy Increase

*Merrit Lee Mallory, Jim Ball, Darryl Dowling, Ed
Hudson, Dick Lord, Alan Tatum (ORNL)*

FPAE033—Operational Availability of the SNS During Commissioning

George W. Dodson (ORNL/SNS)

FPAE034—Present Status of the J-PARC Accelerators

Junichi Kishiro (JAERI/LINAC)

FPAE035—Steps Towards a 3 mA, 1.8 MW Proton Beam at the PSI Cyclotron Facility

Pierre A. Schmelzbach (PSI)

FPAE036—Lattice Modification of a 1.2 GeV STB Ring for Generation of High Energy Gamma-Rays Using Internal Target Wire

Fujio Hinode, Hiroyuki Hama, Masayuki Kawai, Akira Kurihara, Atsushi Miyamoto, Masakatsu Mutoh, Masashi Nanao, Yoshinobu Shibasaki, Katsuhiko Shinto, Shigenobu Takahashi, Takumi Tanaka (LNS)

FPAE037—SPIRAL 2 RFQ Prototype Tests

Robin Ferdinand, Gérard Congretel, Aline Curtoni, Olivier Delferriere, Alain France, Didier Leboeuf, Jean-Christian Toussaint (CEA/DSM/DAPNIA), Marco Di Giacomo (GANIL)

FPAE038—New Four-Section Design Procedure for High Current Radio Frequency Quadrupole Accelerators

Chuan Zhang, Alwin Schempp (IAP), Zhiyu Guo (PKU/IHIP)

FPAE039—The Prototype of the First SCDTL Module of the TOP Linac

Luigi Picardi, Concetta Ronsivalle (ENEA C.R. Frascati), Salvatore Frullani (INFN)

FPAE040—First Operation of PIAVE, the Heavy Ion Injector Based on Superconducting RFQ's

Giovanni Bisoffi, Giorgio Bassato, Andrea Battistella, Giampietro Bezzon, Lucia Boscagli, Andrea Calore, Stefania Canella, Osvaldo Carletto, Davide Carlucci, Francesca Chiurlotto, Michele Comunian, Mauro De Lazzari, Alberto Facco, Enrico Fagotti, Augusto Lombardi, Paolo Modanese, M. Francesca Moisio, Andrea Pisent, Marco Poggi, Anna Maria Porcellato, Sergey Stark (INFN/LNL)

FPAE041—Beam Commissioning of the PIAVE Non-RFQ Resonators

Alberto Facco, Fabio Scarpa, Davide Zenere (INFN/LNL)

FPAE042—Beam Commissioning of the Superconducting RFQs of the New LNL Injector PIAVE

Andrea Pisent, Giovanni Bisoffi, Davide Carlucci, Marco Cavenago, Francesca Chiurlotto, Michele Comunian, Enrico Fagotti, Alessio Galatà, Marco Poggi, Anna Maria Porcellato, Emanuele Sattin (INFN/LNL)

FPAE043—Transverse Tuning Scheme for J-PARC Linac

Masanori Ikegami, Zenei Igarashi, Seishu Lee (KEK), Hisashi Akikawa, Kazuo Hasegawa, Yasuhiro Kondo, Tomohiro Ohkawa (JAERI), Hiroyuki Ao, Susumu Sato, Tetsuo Tomisawa, Akira Ueno (JAERI/LINAC)

FPAE044—Test Results of the PEFP 3MeV RFQ Upgrade

Yong-Sub Cho, Sang-Hyo Han, Ji-ho Jang, Han-Sung Kim, Yong-Hwan Kim, Hyeok-Jung Kwon, Mi-Young Park, Kyung Tae Seol (KAERI)

FPAE045—Design of the PEFP MEBT

Ji-ho Jang, Yong-Sub Cho, Yong-Hwan Kim, Hyeok-Jung Kwon (KAERI)

FPAE046—Initial Test of the PEFP 20MeV DTL

Han-Sung Kim, Yong-Sub Cho, Sang-Hyo Han, Ji-ho Jang, Yong-Hwan Kim, Hyeok-Jung Kwon, Mi-Young Park, Kyung Tae Seol (KAERI), Yong-Suk Hwang (SNU)

FPAE047—Test Scheme Setup for the PEFP 20MeV DTL

Han-Sung Kim, Yong-Sub Cho, Yong-Hwan Kim, Hyeok-Jung Kwon, Kyung Tae Seol (KAERI), Yong-Suk Hwang (SNU)

FPAE048—Fabrication of the PEFP 3MeV RFQ Upgrade

Hyeok-Jung Kwon, Yong-Sub Cho, Ji-Ho Jang, Han-Sung Kim, Yong-Hwan Kim (KAERI)

FPAE049—Development and Implementation of AT Procedure for the SNS Linac

Alexander Feschenko, Sergey Bragin, Yuri Kiselev, Leonid Vladimirovich Kravchuk, Olga Volodkevich (RAS/INR), Alexander V. Aleksandrov, John Galambos, Stuart Henderson, Andrei P. Shishlo (ORNL/SNS)

FPAE050—Injector Linac for the BNL Super Neutrino Beam Project

Deepak Raparia, James Alessi, Alessandro Ruggiero, Wu-Tsung Weng (BNL)

FPAE051—Performance of a CW RFQ Injector for the IUCF Cyclotron

Vladimir Peter Derenchuk, Vladimir Anferov, Dennis Friesel (IUCF), Robert Wray Hamm (AccSys), John William Staples (LBNL)

FPAE052—The LENS 7 MeV, 10 mA Proton Linac

Vladimir Peter Derenchuk, David Baxter, Alexander Bogdanov, William Philip Jones, Thomas Rinckel, Keith Solberg (IUCF)

FPAE053—Isobar Suppression by Photodetachment in a Gas-Filled RF Quadrupole Ion Guide

Yuan Liu, James R. Beene, Aaron Havener, Charles Havener, Felix Liang (ORNL)

FPAE054—Front End Design of a Multi-GeV H-minus Linac

Peter Ostroumov, Kenneth Shepard (ANL), G William Foster, Ivan Gonin, Gennady Romanov (Fermilab), Andrej Kolomiets (on leave) (ITEP)

FPAE055—Heavy-Ion Beam Dynamics in the RIA Post-Accelerator

Peter Ostroumov, Vladislav Aseev (ANL), Andrej Kolomiets (on leave) (ITEP)

FPAE056—Review of a Spoke-Cavity Design Option for the RIA Driver Linac

Peter Ostroumov, Kenneth Shepard (ANL), Jean Roger Delayen (Jefferson Lab)

FPAE057—Beam Dynamics Studies and Beam Quality in the SNS Normal-Conducting Linac

Stuart Henderson, Alexander V. Aleksandrov, Dirk Alan Bartkoski, Chungming Chu, Sarah M. Cousineau, Viatcheslav V. Danilov, George W. Dodson, John Galambos, Dong-o Jeon, Michael Plum, Martin P. Stockli (ORNL/SNS)

FPAE058—Spallation Neutron Source Superconducting Linac Commissioning Algorithms

Stuart Henderson, Isidoro Enrico Campisi, John Galambos, Dong-o Jeon, Yan Zhang (ORNL/SNS)

FPAE059—Transverse Matching Techniques for the SNS Linac

Dong-o Jeon, Chungming Chu, Viatcheslav V. Danilov (ORNL/SNS)

FPAE060—Challenges for Vertical Injection and Extraction in the Duke Booster Synchrotron

Stepan Mikhailov, Jingyi Li, Y. K. Wu (DU/FEL), Yuri Matveev, Dmitry Shvedov (BINP SB RAS)

FPAE061—Status of the Booster Injector for the Duke FEL Storage Ring

Stepan Mikhailov, Matthew D. Busch, Mark Emamian, Joe Faircloth, Steven M. Hartman, Jingyi Li, Victor Popov, Gary Swift, Patrick Walter Wallace, Ping Wang, Y. K. Wu (DU/FEL), Nikolai Gavrilov, Yuri Matveev, Dmitry Shvedov, Nikolay Vinokurov (BINP SB RAS)

FPAE062—Beam Parameters of a Two-Sectional Electron Linac with the Injector Based on a Resonance System with Evanescent Oscillations

Viktor Mytrochenko, Mykola Ivanovich Ayzatskiy, Victor Boriskin, Anatoly Nikolayevich Dovbnya, Igor

Khodak, Volodymyr Kushnir, Anatoliy Opanasenko, Sergey Perezhogin, Antonina Savchenko, Dmitriy Stepin, Valeriy Tatanov, Valentin Zhiglo (NSC/KIPT)

FPAE063—Improvements of Machine Reliability and Beam Quality in SPring-8 Linac for Top-Up Injection into Two Storage Rings

Hirofumi Hanaki, Takao Asaka, Hideki Dewa, Toshiaki Kobayashi, Akihiko Mizuno, Shinsuke Suzuki, Tsutomu Taniuchi, Hiromitsu Tomizawa, Kenichi Yanagida (JASRI/SPring-8)

FPAE064—An Intense-Beam RFQ Development at IHEP

Shinian Fu, Shouxian Fang, Keyun Gong, Jian Li, Huafu Ouyang, Jiming Qiao, Taoguang Xu, Wenwu Xu, Xinan Xu, Yuan Yao, Huasun Zhang, Zhonghua Zhang (IHEP Beijing,), Xialing Guan (CIAE), Jia-Xun Fang, Zhiyu Guo (PKU/IHIP)

FPAE065—Development of Beam Transport System for High Current RFQ Linac

Noriyosu Hayashizaki, Toshiyuki Hattori (RLNR), Robert Jameson (IAP), Masahiro Okamura (RIKEN)

FPAE066—The IFUSP Microtron New Configuration

Mauricio Lima Lopes, Marcos Martins, Paulo Beolchi Rios, Jiro Takahashi (USP/LAL)

FPAE067—Present Design and Calculation for the Injection-Dump Line of the RCS at J-PARC

Pranab Kumar Saha, Hideaki Hotchi, Yoshiro Irie, Fumiaki Noda (JAERI/J-PARC), Shinji Machida, Izumi Sakai (KEK)

FPAE068—Charge Strippers in the RIKEN RI-Beam Factory

Hiromichi Ryuto, Nobuhisa Fukunishi, Akira Goto, Hiroo Hasebe, Naohito Inabe, Osamu Kamigaito, Masayuki Kase, Yasuhige Yano, Shigeru Yokouchi (RIKEN/RARF/CC)

FPAE069—DESIREE—A Double Electrostatic Storage Ring for Low Energy Ion-Ion Collisions

Leif Liljeby, Guillermo Andler, Lars Bagge, Mikael Blom, Håkan Danared, Anders Källberg, Sven Leontine, Patrik Löfgren, Andras Paal, Karl-Gunnar Rensfelt, Ansgar Simonsson, Örjan Skeppstedt (MSL), Henrik Cederquist, Mats Larsson, Henning Thordal Schmidt, Kjell Schmidt (Stockholm University)

FPAE070—A Collimation Scheme for Ions Changing Charge State in the LEIR Ring

Jaroslaw Pasternak, Cathelijne Bal, Christian Carli, Michel Chanel, Edgar Mahner (CERN)

FPAE071—Initial Results on Neutralized Drift Compression Experiments (NDCX) for High Intensity Ion Beam

Prabir Kumar Roy, Andre Anders, Frank Bieniosek, Shmuel Eylon, Wayne Greenway, Enrique Henestroza, Matthaeus Leitner, B. Grant Logan, Derek Shuman, David Vanecek, William Waldron, Simon Yu (LBNL), David Rose, Carsten Hilmar Thoma, Dale Welch (ATK-MR), William M. Sharp (LLNL), Ronald Davidson, Philip Efthimion, Erik P. Gilson, Igor Kaganovich, Adam Sefkow (PPPL)

FPAE072—RF-Kicker System for Secondary Beams at NSCL/MSU

Dmitry Gorelov, Vladimir Andreev, Daniel Bazin, Marc Doleans, Terry L. Grimm, Felix Marti, John Vincent, Xiaoyu Wu (NSCL)

FPAE073—A Free Hg Jet System for Use in a High-Power Target Experiment

Philip Spampinato, Tony Gabriel, Van Graves (ORNL), Harold G Kirk, Nikolaos Simos, Thomas Tsang (BNLk), Adrian Fabich, Helmut Haseroth, Jacques Lettry (CERN), Mark Rennich (ORNL/SNS), Kirk T. McDonald (PU)

FPAE074—Beam Parameter Measurement and Control at the SNS Target

Michael Plum, M. Holding, Tom McManamy (ORNL/SNS)

FPAE075—Radiation Damage to the Elements of the SIS300 Dipoles

Edil Mustafin, Juris Kaugerts, Gebhard Moritz, Gertrud Walter (GSI), Ludmila Latysheva, Nikolai Sobolevskiy (RAS/INR)

FPAE076—The System of Nanosecond 280-keV-He⁺ Pulsed Beam

Pimporn Junphong, Vitoon Ano, Banyat Lekprasert, Dusadee Suwannakachorn, Thiraphat Vilaithong (FNRF), Helmut Wiedemann (SLAC)

FPAE077—LSP Simulations of the Neutralized Drift Compression Experiment

Carsten Hilmar Thoma, Dale Welch (ATK-MR), Shmuel Eylon, Enrique Henestroza, Prabir Kumar Roy, Simon Yu (LBNL), Erik P. Gilson (PPPL)

**Poster Session FPAP—Two-Stream Instabilities
and Collective Processes
Park Concourse, 8:30–12:20**

FPAP001—Electron Cloud Build-Up and Instability Study for DAFNE

Cristina Vaccarezza, Roberto Cimino, Alessandro Drago, Mikhail Zobov (INFN/LNF), Giulia Bellodi (CCLRC/RAL/ASTeC), Daniel Schulte, Frank Zimmermann (CERN), Giovanni Rumolo (GSI), Kazuhito Ohmi (KEK), Mauro Torino Francesco Pivi (SLAC)

FPAP002—A Synchrotron Radiation Study on Photon Reflectivity from Al Vacuum Chamber of DAFNE and its Relevance to E-Cloud Simulations

Cristina Vaccarezza, Roberto Cimino (INFN/LNF), Angelo Giglia, Nicola Mahne (ELETTRA), Stefano Nannarone (UNIMORE)

FPAP003—Simulation Study of the Electron Cloud Instability in SuperKEKB

Hitoshi Fukuma (KEK), Lanfa Wang (BNL)

FPAP004—Simulation Analysis of Head-Tail Motion Caused by Electron Cloud

Kazuhito Ohmi, John Walter Flanagan (KEK)

FPAP005—Coupled Bunch Instability Caused by Electron Cloud

Kazuhito Ohmi, Su Su Win (KEK)

FPAP006—Suppression of Electron Cloud Build-Up with TiN Coating in J-PARC

Takeshi Toyama, Susumu Igarashi, Takako Miura, Kazuhito Ohmi (KEK)

FPAP007—Measurement of the Electron Cloud Density Around the Beam

Ken-ichi Kanazawa, Hitoshi Fukuma, Hiromi Hisamatsu, Yusuke Suetsugu (KEK)

FPAP008—Extension of Impedance Concept as Applied to Electron-Cloud Instability

Evgueni Perevedentsev (BINP SB RAS)

FPAP009—Effects of Localization in Models of Fusion/Energy Confinement in Plasma/Beam Physics in Vlasov Framework

Michael G Zeitlin, Antonina N. Fedorova (RAS/IPME)

FPAP010—Collective Dynamics of High-Brightness Beams in RMS Framework

Michael G Zeitlin, Antonina N. Fedorova (RAS/ IPME)

FPAP011—New Vortices in Axisymmetric Beams in Inhomogeneous Magnetic Field

Yuri Golub (MRTI RAS)

FPAP012—The Effect of Inhomogeneous Magnetic Field on Budker-Chirikov Instability

Yuri Golub (MRTI RAS)

FPAP013—Emittance Growth Caused by Electron Cloud Below the “Fast TMCI” Threshold: Numerical Noise or True Physics?

Elena Benedetto, Frank Zimmermann (CERN), Giuliano Franchetti (GSI), Kazuhito Ohmi (KEK)

FPAP014—Electron Cloud Measurements in the SPS in 2004

Daniel Schulte, Gianluigi Arduini, Vincent Baglin, José Miguel Jimenez, Frank Zimmermann (CERN)

FPAP015—Electron and Gas Effects on Intense, Space-Charge Dominated Ion Beams in Magnetic Quadrupoles: Comparison of Experiments and Simulations

Peter Seidl, David Baca, Frank Bieniosek, Jean-Luc Vay (LBNL), Ronald Cohen, Alex Friedman, David Grote, Michel Kireeff Covo, Steven Mocko Lund, Arthur Molvik (LLNL)

FPAP016—Initial Self-Consistent 3-D Electron-Cloud Simulations of LHC Beam with the Code WARP+POSINST

Jean-Luc Vay (LBNL), Miguel Furman (LBNL/AFR), Ronald Cohen, Alex Friedman, David Grote (LLNL)

FPAP017—Luminosity Optimization With Offset, Crossing Angle, and Distortion

Juhao Wu, Tor Raubenheimer (SLAC)

FPAP018—Luminosity Loss Due to Beam Distortion and the Beam-Beam Instability

Juhao Wu, Alex Chao, Tor Raubenheimer, Andrei Seryi, Christopher Koerner Sramek (SLAC)

FPAP019—Simulation of the Electron-Cloud in the SPS with Different Beam Spacing Configurations

Mauro Torino Francesco Pivi (SLAC), Miguel Furman (LBNL/AFR)

FPAP020—Close Coupling R-Matrix Approach to Simulating Ion-Atom Collisions for Accelerator Applications

Peter Stoltz, Andrew Prideaux (Tech-X)

FPAP021—A Cross-Platform Numerical Model of Ion-Wall Collisions

Seth Andrew Veitzer, Peter Stoltz (Tech-X), Jean-Luc Vay (LBNL), Ronald Cohen, Arthur Molvik (LLNL)

FPAP022—Long Time Simulation of LHC Beam Propagation in Electron Clouds

Bing Feng, Ali Feiz Ghalam, Tom Katsouleas (USC), Elena Benedetto (CERN), Viktor K. Decyk, Warren Mori (UCLA)

FPAP023—Electron Trapping and Sweeping in Quadrupole Magnet

Lanfa Wang, Jie Wei (BNL)

FPAP024—Electron Cloud at the SNS Collimator Region

Lanfa Wang, Hsiao-Chaun Hseuh, Yong Yung Lee, Deepak Raparia, Jie Wei (BNL), Sarah M. Cousineau (ORNL/SNS)

FPAP025—The Threshold Condition for the Quadrupole Mode in the Two-Stream EP Model

Yoichi Sato, Jeffrey Alan Holmes (ORNL/SNS), Shyh-Yuan Lee (IUCF), Robert James Macek (LANL/LANSCE)

FPAP026—Multispecies Weibel and Two-Stream Instabilities for Intense Ion Beam Propagation Through Background Plasma

Ronald Davidson, Igor Kaganovich, Hong Qin, Edward Startsev (PPPL)

FPAP027—Hybrid Quantum Mechanical–Quasi-Classical Model for Evaluating Ionization and Stripping Cross Sections in Atom-Ion Collisions

Igor Kaganovich, Ronald Davidson, Edward Startsev (PPPL), Steven Kecskeleti (UW-Madison/PD), Amitai Bin-Nun (University of Pittsburgh)

FPAP028—Ion Beam Pulse Interaction with Background Plasma in a Solenoidal Magnetic Field

Igor Kaganovich, Ronald Davidson, Edward Startsev (PPPL)

FPAP029—Nonlinear Delta-f Particle Simulations of Collective Effects in High-Intensity 3D Bunched Beams

Hong Qin, Ronald Davidson, Edward Startsev (PPPL)

FPAP030—Initial Experience with the Self-Consistent 3D Electron-Cloud Code PARSEC

Andreas Adelmann (PSI), Miguel Furman (LBNL/AFR)

FPAP031—Model of Electron Cloud Build Up with Secondary Ion-Electron Emission as a Source of Delay Electrons
Vadim Dudnikov (BTG)

FPAP032—Time-of-Flight Plasma-Neutralized Drift Compression of Heavy Ion Beams for High Energy Density Physics
David Rose, Thomas C. Genoni, Dale Welch (ATK-MR), Simon Yu (LBNL), John J. Barnard (LLNL)

FPAP033—Beam Energy Scaling of Secondary Electron Yield from K⁺ Ions Impact on Stainless Steel Surfaces
Michel Kireeff Covo, John J. Barnard, Ronald Cohen, Alex Friedman, David Grote, Arthur Molvik, Glen Westenskow (LLNL), David Baca, Frank Bieniosek, C. M. Celata, Joe W. Kwan, Steven Mocko Lund, Peter Seidl, Jean-Luc Vay (LBNL), Jasmina L. Vujic (UCB)

FPAP034—Space Charge Induced Transport Limits in Periodic Focusing Channels
Steven Mocko Lund (LLNL), Sugreev Chawla (UCB)

FPAP035—A Numerical Study of Ion Hose in the DARHT-II Downstream Transport
James F. McCarrick (LLNL), Jonathan J. Witcher (UCD)

FPAP036—Beam Transport in a Compact Dielectric Wall Induction Accelerator System for Pulsed Radiography
James F. McCarrick, George Caporaso, Yu-Jiuan Chen (LLNL)

Poster Session FPAT—Controls and Computing & Pulsed-Power and High-Intensity Beams/Induction Linacs
Meeting Room 200 A-C, 8:30-12:20

FPAT001—Mathematical Model for Beam Dynamics Optimization in RFQ Systems
Alexander D. Ovsyannikov (St. Petersburg State University)

FPAT002—Automatic Steering of the CLIC Test Facility (CTF3) Linac
Ronen David Lifshitz, Daniel Schulte (CERN, Geneva)

FPAT003—Joining the RHIC Online and Offline Models
Nikolay Malitsky, Kevin A. Brown, Nicholas

*D'Imperio, Alexei V. Fedotov, Alfredo U. Luccio,
Fulvia C. Pilat, Vadim Ptitsyn, Todd Satogata, Steven
Tepikian, Jie Wei (BNL), Richard Michael Talman
(Cornell University)*

FPAT004—Fermilab Booster Ramp Monitor
*Linda Coney, Gerald Guglielmo (Fermilab),
Chandra Lane Jacobs (Duke University), Ami Choi
(UCD)*

FPAT005—A Betatron Tune Fitting Package for the
Tevatron 21.4 MHz Schottky
*Paul Lebrun, Tanaji Sen, Jianming You, Zongwei
Yuan (Fermilab)*

FPAT006—CHEF: An Interactive Program for
Accelerator Optics Calculations
Leo Michelotti, Jean-Francois Ostiguy (Fermilab)

FPAT007—The Fermilab Lattice Information
Repository
*Jean-Francois Ostiguy, Michael Kriss, Michele
McCusker-Whiting, Leo Michelotti (Fermilab)*

FPAT008—SDA-Based Diagnostic and Analysis
Tools for Collider Run II
*Vaia Papadimitriou, Timofei Borisovich Bolshakov
(Fermilab)*

FPAT010—Distributed Beam Steering Algorithm
Using Optimal Control
*Christopher K. Allen (LANL), Eugenio Schuster
(Lehigh University)*

FPAT011—Fast Automated Decoupling at RHIC
Joanne Beebe-Wang (BNL)

FPAT012—Multivariate Analysis of Tevatron Beam
and Luminosity Lifetimes Using the SDA System
*Aimin Xiao, Timofei Borisovich Bolshakov, Paul
Lebrun, Elliott McCrory, Vaia Papadimitriou, Anna
Jean Slaughter (Fermilab)*

FPAT014—Dynamic Visualization of SNS Diagnos-
tics Summary Report and System Status
*Willem Blokland, Cary D. Long, Darryl J. Murphy,
John David Purcell (ORNL/SNS), Andrei Liyu (RAS/
INR), Madhan Sundaram (University of Tennessee)*

FPAT015—Beam Trajectory Correction for SNS
Chungming Chu, Thomas Pelaia (ORNL/SNS)

FPAT016—PASTA – An RF Phase and Amplitude
Scan and Tuning Application
John Galambos (ORNL/SNS)

FPAT017—SNS Diagnostics Tools for Data Acquisi-
tion and Display

Madhan Sundaram (University of Tennessee), Cary D. Long (Innovative Design), Willem Blokland (ORNL/SNS)

FPAT018—Rapid Electromagnetic Analysis of Entire Accelerator Structures
Simon Cooke, Baruch Levush (NRL)

FPAT019—Digital Control of Induction Acceleration System
Kota Torikai, Dai Arakara, Yoshio Arakida, Yoshito Shimosaki, Ken Takayama (KEK)

FPAT020—A Fast Chopper for Intensity Adjustment of Heavy-Ion Beams
Andrey Valerievich Novikov-Borodin, Valeriy Alexandrovich Kutuzov (RAS/INR), Peter Ostroumov (ANL)

FPAT021—Experience with Kicker Beam Coupling Reduction Techniques
Enrique Gaxiola, Fritz Caspers, Laurent Ducimetière, Tom Kroyer (CERN)

FPAT022—Performance of the CERN SPS Fast Extraction for the CNGS Facility
Enrique Gaxiola, Gianluigi Arduini, Peter Burkel, Wolfgang Höfle, Federico Roncarolo, Elmar Vogel, Eugene Vossenberg (CERN)

FPAT023—A Novel Sextupole Switching Power Supply Performance
Chen-Yao Liu (NSRRC)

FPAT024—Transition Radiation of Relativistic Electrons on the Transversal-Limited Thin Targets; Case of Small-Angle Incidence of Electrons
Sergiy Dobrovolskiy, Nikolai Shul'ga (NSC/KIPT)

FPAT025—Electron Dynamics of the Rod-Pinch Diode in the Cygnus Experiment at Los Alamos
Lin Yin, Kevin Bowers, R. Carlson, B. G DeVolder, Thomas Kwan, J. R. Smith, C. M. Snell (LANL), M. J. Berninger (Bechtel Nevada)

FPAT026—The Dynamic Aperture of an Electrostatic Quadrupole Lattice
C. M. Celata, Frank Bieniosek, Peter Seidl (LBNL), Lionel Prost (Fermilab), Alex Friedman, David Grote (LLNL)

FPAT027—Particle Simulations of Acceleration Schemes for High-Current, Short-Bunch, Ion Beams
David Grote, Enrique Henestroza, Simon Yu (LBNL), Alex Friedman, Scott D. Nelson (LLNL), Richard J. Briggs (SAIC)

FPAT028—Extraction and Compression of High Line Charge Density Ion Beams
Enrique Henestroza, Joe W. Kwan, Simon Yu (LBNL), Richard J. Briggs (SAIC)

FPAT029—High Voltage Operation of Helical Pulseline Structures for Ion Acceleration
William Waldron, Lou Reginato (LBNL), Richard J. Briggs (SAIC)

FPAT030—Parametric Studies of Image-Charge Effects in Small-Aperture Alternating-Gradient Focusing Systems
Jing Zhou, Chiping Chen (MIT/PSFC)

FPAT031—High Energy Pulsed Power System for AGS Super Neutrino Focusing Horn
Wu Zhang, Jon Sandberg, Wu-Tsung Weng (BNL)

FPAT032—NuMI Proton Kicker Extraction Magnet Termination Resistor System
Scott Reeves, Chris C. Jensen (Fermilab)

FPAT033—Numerical Model of the DARHT Accelerating Cell
Thomas P. Hughes, Thomas C. Genoni (ATK-MR), Harold Davis, Mike Kang, Benjamin Arnold Prichard (LANL)

FPAT034—Dispersion Analysis of the Pulseline Accelerator
George Caporaso, Scott D. Nelson, Brian R. Poole (LLNL), Richard J. Briggs (SAIC)

FPAT035—Transverse Beam Instability in a Compact Dielectric Wall Induction Accelerator
Yu-Jiuan Chen, James F. McCarrick, Scott D. Nelson (LLNL)

FPAT036—An Induction Linac Test Stand
William DeHope, Dave Goerz, Ron Kihara, Mike Ong, George Vogtlin, Jan-Mark Zentler (LLNL)

FPAT037—Electromagnetic Simulations of Helical-Based Ion Acceleration Structures
Scott D. Nelson, George Caporaso, Alex Friedman, Brian R. Poole (LLNL), William Waldron (LBNL), Richard J. Briggs (SAIC)

FPAT038—Electromagnetic Simulations of Dielectric Wall Accelerator Structures for Electron Beam Acceleration
Scott D. Nelson, Brian R. Poole (LLNL)

FPAT039—Particle Simulations of Dielectric Wall Accelerator Structures
Brian R. Poole, Scott D. Nelson (LLNL)

FPAT040—Advanced Electric and Magnetic Material Models for FDTD Electromagnetic Codes

Brian R. Poole, Scott D. Nelson (LLNL), Scott Langdon (REMCOM Incorporated)

FPAT041—Design and Simulation of an Anode Stalk Support Insulator

Lisa Wang, Timothy Lee Houck (LLNL)

FPAT042—Beam Dynamics and Pulse Duration Control During Final Beam Bunching in Driver System for Heavy Ion Inertial Fusion

Takashi Kikuchi, Shigeo Kawata, Tetsuo Someya (Utsunomiya University), Kazuhiko Horioka, Mitsuo Nakajima (TIT)

FPAT043—Application of Selected Momentum Correction Method Using Induction Voltage Modulator

Takashi Kikuchi, Shigeo Kawata (Utsunomiya University), Takeshi Katayama (CNS), Kazuhiko Horioka (TIT)

FPAT044—Low Cost Magnetic Field Controller

Alexandre Almeida Malafronte, Mauricio Lima Lopes, Marcos Martins (USP/LAL)

FPAT045—Upgrade of the ESRF Vacuum Control System

Daniela Schmied, Michael Hahn, Roberto Kersevan (ESRF)

FPAT046—RF Control System for the DESY VUV-FEL Linac

Valeri Ayvazyan, Gevorg Petrosyan, Kay Rehlich, Stefan Simrock, Piotr Vetrov (DESY)

FPAT047—Control System of 3 GeV Rapid Cycling Synchrotron at J-PARC

Hiroki Takahashi, Yuko Kato, Masato Kawase, Hiroyuki Sako (JAERI/J-PARC), Hiroshi Yoshikawa (JAERI), Hironao Sakaki (JAERI/LINAC), Makoto Sugimoto (Mitsubishi Electric Control Software Corp), Yuichi Ito (Total Saport System Corp.)

FPAT048—Accelerator Control System of J-PARC

Hiroshi Yoshikawa, Hironao Sakaki, Hiroyuki Sako, Hiroki Takahashi (JAERI)

FPAT049—Upgrade of the PF Ring Vacuum Control System

Yasunori Tanimoto, Takashi Nogami, Takashi Obina (KEK)

FPAT050—Improvement RF Control System for the 20 Mev Proton Linac of PEFP

Jong Chel Yoon, Jinhyuk Choi, Jin-Won Lee (PAL, Pohang)

FPAT051—A New Timing System for the Duke Booster and Storage Ring

Grigory Yakovlevich Kurkin (BINP SB RAS), Steven M. Hartman, Stepan Mikhailov, Y. K. Wu (DU/FEL)

FPAT052—Computer Based Monitoring and Control System for Accelerator Applications

Vyacheslav Kurakin, Valery Alekseev, Valery Busygin, Alexander Vladimirovich Koltsov (LPI), Pavel Kurakin (Keldysh Institute of Applied Mathematics)

FPAT053—LabVIEW Library to EPICS Channel Access

Andrei Liyu (RAS/INR), Dave H. Thompson (ORNL/ASD), Willem Blokland (ORNL/SNS)

FPAT054—Control System Architecture with Distributed Modular SBC & DSP-Based Nodes

Viacheslav Ivanovich Vinogradov (RAS/INR)

FPAT055—The Radiation Safety Interlock System for Top-Up Mode Operation at NSRRCC

Chien-Rong Chen, Fu-Dong Chang, Sheau-Ping Kao, Joseph Liu, Rong-Jiun Sheu, Jau-Ping Wang (NSRRCC)

FPAT056—RF Control System Upgrade at CAMD

Victor Paul Suller (CCLRC/DL/ASTeC), Mikhail Fedurin, Paul Jines, Daren Launey (LSU/CAMD)

FPAT057—A TCL/TK Widget for Display of MEDM Screens

Robert Soliday (ANL)

FPAT058—Creating EPICS Soft Channels the Easy Way with sddspcas: Features and Applications

Robert Soliday (ANL)

FPAT059—Event Driven Automatic State Modification of BNL's Booster for NASA Space Radiation Laboratory Solar Particle Simulator

Kevin A. Brown, Severino Binello, Margaret Harvey, John Morris, Adam Rusek, Nicholaos Tsoupas (BNL)

FPAT060—An FPGA-Based Quench Detection and Protection System for Superconducting Accelerator Magnets

Ruben H. Carcagno, Sandor Feher, Michael Joseph Lamm, Andrzej Makulski, Roger Nehring, Darryl Orris, Yuriy Pischalnikov, Mike Tartaglia (Fermilab)

FPAT061—CEBAF Distributed Data Acquisition System

Trent Allison, Tom Powers (Jefferson Lab)

FPAT062—Application of Configurable Soft Core Processors in Nuclear Physics

Hai Dong, Douglas Curry (Jefferson Lab)

FPAT063—Control System for the ORNL Multicharged Ion Research Facility High-Voltage Platform

Mark Bannister, Fred Wolfgang Meyer, John Sinclair (ORNL)

FPAT064—Experience with the EPICS PV Gateway at the APS

Kenneth Evans, Martin Smith (ANL)

FPAT065—Experience of Prototype Control System for the J-PARC Proton Linac

Norihiko Kamikubota (KEK)

FPAT066—The SNS Ring RF Control System

Sheng Peng, David Gurd (ORNL/SNS), Lawrence T. Hoff, Kevin Smith (BNL)

FPAT067—The Design Performance of the Integrated Spallation Neutron Source Vacuum Control System

Johnny Y. Tang, Peter Ladd, Derrick Williams (ORNL/SNS)

FPAT068—Spallation Neutron Source Drift Tube Linac Resonance Control Cooling System Modeling

Johnny Y. Tang, Alexander V. Aleksandrov, Marianne M. Champion, Paul Gibson, James Phillip Schubert (ORNL/SNS), Alexander Feschenko, Yuri Kiselev, A. S. Kovalishin, Leonid Vladimirovich Kravchuk, Adolf Kvasha (RAS/INR)

FPAT069—A Control System for the Duke Booster Synchrotron

Steven M. Hartman, Stepan Mikhailov, Y. K. Wu (DU/FEL)

FPAT070—Performance of COTS I/O Modules in an Accelerator Control System

Steven M. Hartman (DU/FEL)

FPAT071—Timing System for J-PARC

Fumihiko Tamura (JAERI/LINAC), Junsei Chiba, Tadahiko Katoh, Masahito Yoshii (KEK)

FPAT072—The Status of HLS Control System

Liu Gongfa, Xun Bao, Chuan Li, Weimin Li, Jigang Wang, Dong Xie, Ke Xuan (USTC/NSRL), Jingyi Li (DU/FEL)

FPAT073—Orbit Correction System Status and Improvement Proposal for HLS Storage Ring

Lin Wang (USTC/NSRL)

FPAT074—Linear Optics Model Calibration by LOCO in HLS Storage Ring

Lin Wang (USTC/NSRL)

FPAT075—Using a Control System Ethernet Network as a Field Bus

William R. DeVan, Gregory S. Lawson, William H. Wagner (ORNL/ASD), Susan E. Hicks, David M. Wantland, Ernest Williams (ORNL)

FPAT076—PC-LabView Based Control System in SAGA-LS

Hideaki Ohgaki (Kyoto IAE), Hiroyuki Toyokawa (on leave) (AIST), Yositaka Iwasaki (on leave), Shigeru Koda (on leave), Yuichi Takabayashi (on leave), Takio Tomimasu (on leave) (Saga Synchrotron Light Source)

FPAT077—An Accelerator Control Middle Layer Using Matlab

Gregory James Portmann (LBNL/ALS)

FPAT078—Supporting Cavity Production Using an Engineering Data Management System

Lars Hagge, Jochen Buerger (DESY)

FPAT079—Data Base Extension for the Ensemble Model Using a Flexible Implementation

Wolfgang Ackermann, Wolfgang F.O. Müller, Thomas Weiland (TEMF)

FPAT080—Simulations of Beam Injection and Extraction into Ion Sources

Marco Cavenago (INFN/LNL)

FPAT081—A New Version of SixTrack with Collimation and Aperture Interface

Guillaume Robert-Demolaize, Ralph Assmann, Stefano Redaelli, Frank Schmidt (CERN)

FPAT082—From Visualisation to Data Mining with Large Data Sets

Andreas Adelmann (PSI), John M. Shalf, Cristina Siegerist (LBNL), Robert Ryne (LBNL/CBP)

FPAT083—A Portable Parallel High Performance Data Interface for Particle Simulations

Andreas Adelmann (PSI), John M. Shalf, Cristina Siegerist (LBNL), Robert Ryne (LBNL/CBP)

FPAT084—Component/Connection/Signal Modeling of Accelerator Systems

Donald Dohan (ANL)

FPAT085—The TAO Accelerator Simulation Program Environment

Jeffrey Claiborne Smith, David Sagan (Cornell University)

FPAT086—Lucretia: A Matlab-Based Toolbox for the Modeling and Simulation of Single-Pass Electron Beam Transport Systems
Peter Tenenbaum (SLAC)

FPAT087—elegantRingAnalysis: An Interface for High-Throughput Analysis of Storage Ring Lattices Using elegant
Michael Borland (ANL)

FPAT088—Update of Advanced Beam-Dynamics Simulation Tools for RIA
Robert Garnett, James Billen, Thomas Wangler (LANL/LANSCE), Peter Ostroumov (ANL), Ji Qiang, Robert Ryne (LBNL/CBP), Richard York (NSCL), Kenneth Crandall (TechSource)

FPAT089—A Parallel Simplex Optimizer and Its Application to High-Brightness Storage
Hairong Shang, Michael Borland (ANL)

FPAT090—ExperimentDesigner: A Tcl/Tk Interface for Creating Experiments in EPICS
Hairong Shang, Michael Borland (ANL)

FPAT091—LiTrack: A Fast Longitudinal Phase Space Tracking Code with Graphical User Interface
Paul Emma, Karl Leopold Freitag Bane (SLAC)

FPAT092—Optimized Beam Matching Using Extremum Seeking
Eugenio Schuster (Lehigh University), Christopher K. Allen (LANL/LANSCE), Miroslav Krstic (UCSD)

**Oral Session FOPA—Closing Plenary
Ballrooms D-G @ 13:50
Chair: N. Holtkamp (ORNL/SNS)**

13:50 FOPA001—The Spallation Neutron Source: A Powerful Tool for Materials Research
Thomas Edward Mason (ORNL/SNS)

14:25 FOPA002—XFEL/Short Pulse Science
Jochen Schneider (DESY)

15:00 FOPA003—Challenges and Progress in the FAIR Accelerator Project
Peter J. Spiller (GSI)

15:35 FOPA004—Opportunities and Challenges in Neutrino Physics
Stanley George Wojcicki (Stanford University)

16:10 FOPA005—Science of Rare Isotope Accelerator (RIA) and the Project Status
Witold Nazarewicz (UTK)

16:45 Closing Remarks
N. Holtkamp (ORNL/SNS), S. Chattopadhyay (JLab)



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