

1st National Neutron Scattering School
September 5th – September 13th, 2025

SCHEDULE FOR Friday, September 5th, 2025

Arrival to TYS throughout the day

6:30 - 8:30 PM – Informal get-together at Oak Ridge Hotel. Buffet and beverages for all school participants. Participants will pick up their badges for ORNL site access. **Please bring Real ID and any other necessary documents to dinner.** If for some reason, you are unable to get your badge, you may do so on Saturday morning.

Oak Ridge SCHOOL OPENING - SATURDAY, September 6th, 2025

Spallation Neutron Source (SNS) Building 8600, Iran Thomas Auditorium, Room A103

1st National Neutron Scattering School
September 6th – September 12th, 2025

Spallation Neutron Source (SNS) Building 8600, Iran Thomas Auditorium, Room A103

| Saturday September 6 th | Saturday September 6 th | Sunday September 7 th |
|--|--|---|
| 7:45 am Bus departs Hotel | | 7:45 am Bus departs Hotel |
| 8:30-9:00 Badging – front lobby | 2:35 – 3:35 Interaction Neutrons with Matter I Roger Pynn University of Indiana | Lecture (8:30 – 9:30) Interaction of Neutrons with Matter II Rana Ashkar Virginia Tech |
| 9-9:30 Training Video – Iran Thomas | | |
| 9:30-10:00 Hands on training – breakout rooms | | |
| | | Break (9:30 – 9:50) |
| 10:00-10:45 Welcome Jon Taylor and Organizing committee | 3:35-6:05 Tour #1 and #2 | Lecture (9:50 – 10:50) Interaction of Neutrons with Matter III Efrain Rodriguez University of Maryland |
| Break (10:45 – 11:05) | | Break (10:50 – 11:10) |
| Lecture (11:05 – 12:00) Neutron User Facilities Mark Lumsden, ORNL | | Lecture 11:10-12:00 Single Crystal Diffraction William Ratcliff, NIST |
| Lunch (12:00 – 1:15) | | Lunch (12:00 – 1:15) |
| 1:15 – 2:15 Neutron Generation, Optics, Detection, and Instrumentation Thomas Huegle, ORNL | | Lecture (1:15 – 2:15) Powder Diffraction Ally Fry-Petit Cal State Fullerton |
| | | Break (2:15-2:35) |
| | | Lecture (2:35-3:35) Neutron Imaging Yuxuan Zhang, ORNL Hassina Bilheux, ORNL Jean Bilheux, ORNL |
| | | Break (3:35-4:00) |
| | | 4:00-5:15 Tour #3 |
| Break 2:15-2:35 | 6:05-715 Dinner and Discussion Buses depart ORNL for hotel at 7:15 pm | 5:15 – 6:30 Dinner and Discussion Buses depart ORNL for hotel at 6:30 pm |

| Monday September 8 th | Tuesday September 9 th | Wednesday September 10 th | Thursday September 11 th | Friday September 12 th | Saturday September 13 th |
|---|---|--|---|---|--|
| 7:45 am Bus departs Hotel | 7:45 am Bus departs Hotel | 7:45 am Bus departs Hotel | 7:45 am Bus departs Hotel | 7:45 am Bus departs Hotel | |
| Lecture (8:30 – 9:30) Neutron Spectroscopy Bruce Gaulin McMaster University | Lecture (8:30 – 9:30) Small Angle Neutron Scattering Lisa Debeer-Schmitt, ORNL | Lecture (8:30 – 9:15) Diffuse Scattering Joe Paddison, ORNL | Lecture (8:30 – 9:15) Vibrational Spectroscopy Yongqiang Cheng, ORNL | 8:30-12:30 HFIR/SNS Experiment 4 (xx Instruments) See Experiments Schedule | Departure for travel home |
| Group Photo (9:30 – 9:50) | Break (9:30 – 9:50) | Break (9:15 – 9:35) | Break (9:15 – 9:35) | | |
| Lecture (9:50 – 10:50) Neutron Spectroscopy II Bruce Gaulin McMaster University | Lecture (9:50 – 10:40) PDF Kate Page, UTK | Lecture (9:35 – 10:35) Neutron Reflectivity Tim Charlton and Hanyu Wang ORNL | Lecture (9:35 – 10:20) Quasi-elastic Neutron Scattering Niina Jalarvo, ORNL | | |
| Break (10:50 – 11:10) | Break (10:40 – 11:00) | Break (10:35 – 11:00) | Break (10:20 – 10:40) | | |
| Lecture (11:10 – 12:00) Magnetic Scattering Pat Clancy McMaster University | Lecture (11:00 – 12:00) In situ / in operando Jiu Liu and Cheng Li ORNL | Lecture (11:00 – 12:00) Neutron Polarization Barry Winn + posters ORNL | Lecture (10:40- 11:25) Engineering Diffraction Donald Brown, LANL Break (11:25 – 11:45) Lecture (11:45 – 12:30) Non – equilibrium – C. Hoffman + posters ORNL | | |
| Lunch (12:00 – 1:15) | Lunch (12:00 – 1:15) | Lunch (12:00 – 1:00) | Lunch (12:30 – 1:30) | Lunch (12:30 – 1:45) | |
| 1:15 – 5:45 HFIR/SNS Experiment 1 (xx Instruments) See Experiments Schedule | 1:15 – 5:45 HFIR/SNS Experiment 2 (xx Instruments) See Experiments Schedule | Lecture (1:00 – 1:45) Machine Learning and AI for Scattering Experiments Thomas Proffen, ORNL Break (1:45 – 2:00) Lecture (2:00 – 2:50) Scattering in extreme conditions Antonio Moreira dos Santos ORNL Break (2:50 – 3:10) 3:10 – 4:10 Proposal writing Michelle Dolgos ORNL Bus Trip from ORNL to Oak Ridge hotel to picnic venue (4:10 – 5:30) | 1:30 – 6:00 HFIR/SNS Experiment 3 (xx Instruments) See Experiments Schedule | Lecture (1:45-2:30) Neutron Spin Echo Jason Gardener, ORNL Break (2:30 – 2:50) Lecture (2:50 – 3:50) Diffraction and Spectroscopy at TOF vs Continuous Sources Stuart Calder, ORNL Garrett Granroth, ORNL Break (3:50 – 4:10) 4:10-5:00 Career Panel 5:00 Quick Thank you & Farewell | |
| 5:45 – 7:00 Dinner and Discussion Buses depart ORNL for hotel at 7 pm | 5:45 – 7:00 Dinner and Discussion Buses depart ORNL for hotel at 7:00 pm | 5:30 – 7:30 Melton Hill Lake Picnic Buses depart picnic for Hotel at 7:30 pm | 6:00 – 7:00 Dinner & Discussion Buses depart ORNL for hotel at 7:00 pm | 5:00 – 7:30 Dinner & Social at SNS Hosts: Mary Odom, Michelle Everett, ORNL Buses depart ORNL for hotel at 7:30 pm | |