



# NEUTRON SCIENCES

## 2023 USER MEETING AGENDA

### June 5th - June 8th

#### Keynote Speakers



**Linda Horton**

Associate Director of Science for Basic Energy Sciences  
Department of Energy



**Sossina Haile**

Northwestern University



**Collin Broholm**

Johns Hopkins University



**Raquel Lieberman**

Georgia Institute of Technology



**Norman Wagner**

University of Delaware



**Allyson Fry-Petit**

California State University, Fullerton

## Monday, June 5 - Workshop Day 1

8:00 a.m.	Check in and badging <b>Location:</b> SNS 8600, first floor lobby
9:00 a.m. - 5 p.m.	<b>Workshop 1:</b> Data processing of neutron total scattering and how to avoid potential pitfalls along the way <b>Organizers:</b> Yuanpeng Zhang, Matt Tucker <b>Location:</b> HFIR 7995, Room 302B (meet in 8600 for registration and bus to HFIR)
9:00 a.m. - 7:30 p.m.	<b>Workshop 2:</b> Magnetic Structure Determination from Neutron Diffraction Data Using GSAS-II <b>Organizers:</b> Stuart Calder, Ovi Garlea, Huibo Cao, Keith Taddei, Qiang Zhang <b>Location:</b> SNS 8600, C-156
9:00 a.m. - 5:30 p.m.	<b>Workshop 3:</b> Single Crystal Data Processing for Direct Geometry Spectrometers <b>Organizers:</b> Raphael Hermann, Martin Mourigal, Garrett Granroth, Barry Winn, YQ Cheng, Andrei Savici, Jon Taylor <b>Location:</b> ORNL cabin (meet in 8600 for registration and carpooling)

## Tuesday, June 6 - User Meeting Day 1

8:00 a.m.	Check in and badging <b>Location:</b> SNS 8600, first floor lobby
9:00 a.m. - 12:15 p.m.	<b>Welcome and Plenary Session A (Iran Thomas Auditorium)</b>
9:00 a.m.	Welcome Igor Zaliznyak, SHUG Executive Committee Chair Brookhaven National Laboratory  DOE Office of Science Update Linda Horton, Associate Director of Science for Basic Energy Sciences, Department of Energy
9:30 a.m.	ORNL Neutron Sciences Facility updates Ken Andersen, Associate Laboratory Director for Neutron Sciences John Galambos, Proton Power Upgrade Director Rob Dimeo, HFIR Upgrade Project Director Hans Christen, Neutron Scattering Division Director
10:10 a.m.	Break - Posters about HFIR/SNS capabilities and updates on display in the lobby
10:20 a.m.	<b>Keynote 1:</b> The Science and Technology of Oxyanion Based Superprotonic Conductors Sossina Haile, Walter P. Murphy Professor of Materials Science and Engineering and Professor of Applied Physics, Northwestern University
11:10 a.m.	<b>Keynote 2:</b> Stroboscopic neutron scattering and magnetic relaxation in spin ice Collin Broholm, Gerhard H. Dieke Professor of Physics and Astronomy, Johns Hopkins University
12:00 p.m.	Group Photo, Iran Thomas Auditorium Stage
12:15 p.m.	Working lunch: Table Topics on software and data analysis <b>Location:</b> SNS 8600, ground floor patio

1:30- 3:30 p.m.	PARALLEL SESSIONS	
	Iran Thomas Auditorium	Room C-156
	<b>Quantum Materials</b> Moderator: Ben Frandsen, Brigham Young University	<b>Biology &amp; Life Sciences</b> Moderator: Amy Xu, Louisiana State University
1:30 p.m.	Despina Louca, University of Virginia	Andrew Stephen, Frederick National Laboratory for Cancer Research
1:50 p.m.	Pengcheng Dai, Rice University	Frederick Heberle, University of Tennessee
2:10 p.m.	Sara Haravifard, Duke University	Nayomi Plaza, USDA Forest Service
	<b>Functional/Energy Materials</b> Moderator: Julia Zaikina, Iowa State University	<b>Polymers, Colloids &amp; Complex Fluids</b> Moderator: Yun Liu, NIST Center for Neutron Research
2:30 p.m.	Olivier Delaire, Duke University	Jacinta Conrad, University of Houston
2:50 p.m.	Jesse Brown, Oak Ridge National Laboratory	Ryan Murphy, NIST Center for Neutron Research
3:10 p.m.	Zhenzhen Yu, Colorado School of Mines	Xiaodan Gu, University of Southern Mississippi (Virtual Talk)
3:30 p.m.	Break - Posters about HFIR/SNS capabilities and updates on display in the lobby	
4:00 p.m.	Town Hall Meeting on Scientific Computing Capabilities	
5:00 p.m.	SNS Tours — Meet in Building SNS 8600, lobby HFIR Tours — Vans outside main entrance of SNS Building 8600	
6:00 p.m.	Poster Reception (heavy hors d'oeuvres) Location: SNS 8600 ground floor	
7:30 p.m.	Close	

Wednesday, June 7 - User Meeting Day 2	
9:00 a.m. - 12:15 p.m.	WELCOME AND PLENARY SESSION A (IRAN THOMAS AUDITORIUM)
9:00 a.m.	Welcome
9:10 a.m.	<b>Keynote 3:</b> Solution structures of an intramembrane aspartyl protease and its lipid bilayer environment obtained via SANS Raquel Lieberman, Professor of Chemistry & Biochemistry, Georgia Institute of Technology
10:00 a.m.	Break - Posters about HFIR/SNS capabilities and updates on display in the lobby
10:10 a.m.	<b>Keynote 4:</b> Investigating the stability of monoclonal antibodies in solution and at interfaces using NSE, NR, & SANS with applications in formulation science. Norman Wagner, Unidel Robert L. Pigford Chair in Chemical & Biomolecular Engineering, University of Delaware
11:00 a.m.	<b>Second Target Station Update</b> Ken Herwig, STS Technical Director, Oak Ridge National Laboratory

11:30 a.m.	<p>Sample Environment Parallel Town Hall Meetings</p> <ul style="list-style-type: none"> <li>• High temperature - Matthias Frontzek</li> <li>• Sample changer – Melanie Kirkham</li> <li>• Polarization – Barry Winn</li> <li>• Low-Temperature and Magnets – Stuart Calder</li> <li>• High Pressure – Yan Wu</li> <li>• Soft Matter – John Katsaras</li> </ul>	<p><b>Location:</b></p> <p>C-250 C-156 C-464 Iran Thomas Auditorium C-354 C-152</p>
12:15 – 1:30 p.m.	<p>Working lunch: Table Topics on sample environment and instrument capabilities <b>Location:</b> SNS 8600 ground floor patio</p>	
1:30- 3:30 p.m.	<p><b>PARALLEL SESSIONS</b></p>	
	<p><b>Iran Thomas Auditorium</b></p>	<p><b>Room C-156</b></p>
	<p><b>Quantum Materials</b> Moderator: Ben Frandsen, Brigham Young University</p>	<p><b>Biology &amp; Life Sciences</b> Moderator: Amy Xu, Louisiana State University</p>
1:30 p.m.	Alan Tennant, University of Tennessee	Julie Champion, Georgia Institute of Technology
1:50 p.m.	Ni Ni, University of California, Los Angeles (Virtual Talk)	Evgenyi Shalaev, AbbVie
2:10 p.m.	Valery Kiryukhin, Rutgers University	Yue Yuan, Oak Ridge National Laboratory
	<p><b>Functional/Energy Materials</b> Moderator: Julia Zaikina, Iowa State University</p>	<p><b>Polymers, Colloids &amp; Complex Fluids</b> Moderator: Yun Liu, NIST Center for Neutron Research</p>
2:30 p.m.	Allyson Fry-Petit, California State University, Fullerton	Jeffrey Richards, Northwestern University
2:50 p.m.	Hui (Claire) Xiong, Boise State University	Gernot Rother, Oak Ridge National Laboratory
3:10 p.m.	Angus Wilkinson, Georgia Institute of Technology	Guoliang Liu, Virginia Tech (Virtual Talk)
3:30 p.m.	<p>Break - Posters about HFIR/SNS capabilities and updates on display in the lobby</p>	
4:00 p.m.	<p><b>SHUG Town Hall</b> <b>Keynote 5:</b> Inspiring the next generation of neutron scatterers Allyson Fry-Petit, Associate Professor of Analytical and Materials Chemistry, California State University, Fullerton</p> <p><b>Best Poster and Outstanding Staff Awards</b></p>	
5:00 p.m.	<p><b>SNS Tours</b> — Meet in Building SNS 8600, lobby <b>HFIR Tours</b> — Vans outside main entrance of SNS Building 8600</p>	
6:00 p.m.	<p>Close</p>	

**Thursday, June 8 – Workshop Day 2**

9:00 a.m. - 5 p.m.	<p><b>Workshop 4:</b> Second Target Station Satellite Meeting <b>Organizer:</b> Leighton Coates <b>Location:</b> 8600, Iran Thomas auditorium</p>
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