

UPPSALA
UNIVERSITET



Swedish Neutron Week 2025

9-13 June, 2025
Visby, Gotland



SWEDISH FOUNDATION for
STRATEGIC RESEARCH





Conference Program

Monday 9th June

15:00 – 16:00	Arrival & Registration + Hang Posters (→ Ferry arrives 15:00)	
Welcome + Plenary Talks + Keynotes (Chair: Martin Månsson, KTH)		
16:00 – 16:10	Welcome / Opening of the Meeting	Martin Månsson <i>SwedNess / KTH</i> Felix Roosen-Runge <i>SNSS / Lund University</i> Jenny Helin <i>UU Campus Gotland</i>
16:10 – 16:50	Plenary Talk “Cultural Heritage”	Prof. Patrick Randolph-Quinney <i>Uppsala University</i>
16:50 – 17:30	Plenary Talk “Quantum Materials”	Prof. Stephen Blundell <i>University of Oxford</i>
17:30 – 17:45	FIKA	
17:45 – 18:10	Keynote Status/Plans/Highlights of ESS	Prof. Giovanna Fragneto <i>Science Director, ESS, Sweden</i>
18:10 – 18:35	Keynote Status/Plans/Highlights of CSNS	Prof. Sheng Wang <i>Director, CSNS, IHEP, China</i>
18:35 – 19:00	Keynote Status/Plans/Highlights of “ISIS / ISIS-II” Neutron and Muon Source	Dr. Philip King online <i>Associate Director for Partnerships and Programmes, ISIS, STFC, UK</i>
19:00 – 19:15	Keynote ISIS/Sweden Collaboration Projects	Prof. Aleksandar Matic <i>Swedish Research Council (VR)</i>
19:15 – 19:30	Quantum Beam Optics Sweden AB	Dr. Anton Zubayer <i>Linköping University</i>
19:30 – ...	DINNER @ Clarion Hotel Wisby (Also Meeting: PI + SNSS + SwedNess board)	

Tuesday 10th June

“Soft Matter & Life-Science” (Chair: Felix Roosen-Runge, LU)		
06:30 – 08:15	BREAKFAST	
08:15 – 08:45	Invited Talk Revealing Molecular Rearrangements in Lipid Membranes via Time-Resolved Neutron Reflectometry	Dr. Yuri Gerelli <i>CNR – Institute for Complex Systems, Italy</i>
08:45 – 09:00	The dynamic behaviour of Styrene Maleic Acid Lipid Particles with and without membrane proteins	Dr. Tom Arnold <i>ESS</i>
09:00 – 09:15	Interaction of sodium perfluorooctanoate and sodium perfluorohexanoate with Moringa oleifera seed protein	Njelama Sanga <i>Uppsala University</i>
09:15 – 09:30	Studying structure – function relationships in lipid nanocarriers for the delivery of oligonucleotides	Prof. Hanna Barriga <i>KTH, SciLifeLab</i>
09:30 – 09:45	Grazing Incidence Small-Angle Neutron Scattering for Investigating Functional Materials	Prof. Stephan V. Roth <i>KTH / DESY</i>
09:45 – 10:00	Moisture-Driven Structural Reorganization and Phonon Dynamics in Cellulose Nanomaterials	Agnes Åhl <i>Stockholm University</i>
10:00 – 10:15	Combining SANS and optical spectroscopies to resolve assembly mechanisms in silk proteins	Juanita Francis <i>Lund University</i>
10:15 – 10:30	FIKA / POSTERS	



Tuesday 10th June (continued)

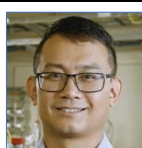
SNSS/SwedNess General Assemblies (Chair: Martin Månsson, KTH)		
10:30 – 11:00	SNSS Business Meeting / Community Update	Max Wolff & Hanna Barriga SNSS / Uppsala Uiniversity / KTH
11:00 – 11:15	SAGA: A surface scattering beamline for ESS	Dr. Sebastian Köhler LINXS
11:15 – 11:30	High-Precision Searches for Baryon Number Violation using HIBEAM	Matthias Holl Lund University
11:30 – 12:15	SwedNess Update	Martin Månsson SwedNess / KTH
12:15 – 13:30	LUNCH / POSTERS	
“Hard-Matter / Engineering” (Chair: Kristine Bakken, Chalmers)		
13:30 – 14:00	Invited Talk Using pair distribution functions to under-stand local structure in metallic systems	Dr. Lewis Owen University of Sheffield
14:00 – 14:15	Effect of texture on pair distribution function analysis of engineering materials	Monika Rolinska KTH Royal Institute of Technology
14:15 – 14:30	The progress of the neutron total scattering diffractometer MPI at CSNS	Prof. Wen Yin IHEP, CAS, CSNS
14:30 – 15:00	Invited Talk From Powder to Part: Real-Time Insights into Laser-Based Additive Manufacturing with Neutrons and X-rays	Dr. Steven Van Petegem Paul Scherrer Institute (PSI)
15:00 – 15:15	Assessment of build plate temperature effect in additively manufactured metal components using neutrons	Dr. Prabhat Pant Uppsala University
15:15 – 15:30	FIKA / POSTERS	
“Cool Techniques” (Chair: Dr. Andrew Jackson, ESS)		
15:30 – 16:00	Invited Talk Application of elemental analysis with muonic x-rays	Assoc. Prof. Izumi Umegaki KEK, J-PARC
16:00 – 16:30	Invited Talk Standard and Beyond neutron techniques for Heritage Science: Diffraction and elemental analysis	Dr. Antonella Scherillo ISIS - STFC
16:30 – 16:45	Frontiers in High-Pressure Hydrogenation with Neutrons	Dr. Paulo H.B. Brant Carvalho J-PARC + ESS
16:45 – 17:00	Spin-echo SANS	Prof. Katia Pappas TU Delft
17:00 – 17:15	Entanglement witnesses in neutron scattering	Prof. Em. Erik B. Karlsson Uppsala University
17:15 – 17:30	Neutron Dark-Field Tomography Reveals Nano-architectures in Macroscopic Biomaterials	Dr. Elisabetta Nocerino Stockholm University / PSI
17:30 – 17:45	Multiscale Magnetization Modeling with μ -ASD: Connecting Simulations to Neutron Scattering Observables	Dr. Manuel Pereiro Uppsala University
17:45 – 19:15	POSTERS / BEER	
19:30 – 22:30	CONFERENCE DINNER St Nicolai’s Church Ruin --- Smedjegatan 19 621 55 Visby 	https://maps.app.goo.gl/JHaNydVrS2MXZaEP6



Wednesday 11th June

“Quantum Materials / Magnetism” (Chair: Yasmine Sassa, KTH)		
06:30 – 08:30	BREAKFAST	
08:15 – 08:45	Invited Talk Investigating quantum spin chains with neutron scattering	Prof. Bella Lake Helmholtz-Zentrum Berlin (HZB)
08:45 – 09:15	Invited Talk Chiral Split Magnon in Altermagnetic MnTe	Zheyuan Liu University of Tokyo, ISSP
09:15 – 09:30	Field-Induced Shadow Mode in Square Lattice Antiferromagnet	Frank Elson KTH Royal Institute of Technology
09:30 – 09:45	An inelastic neutron scattering study of the magnetic field dependence of the quantum dipolar garnet: Yb ₃ Ga ₅ O ₁₂	Dr. Pascale Deen ESS + ILL
09:45 – 10:00	Quantum-wells and interlayer exchange coupling in Fe/MgO(001) superlattices revealed by neutron reflectivity	Prof. Björgvin Hjörvarsson Uppsala University
10:00 – 10:15	Uncovering Hidden Octupolar Correlations in Yb ₂ Ti ₂ O ₇	Miriam Piccinini KTH Royal Institute of Technology
10:15 – 10:30	Tuning structural modulations and magnetic properties in formate coordination polymers [CH ₃ NH ₃]Co _x Ni _{1-x} (HCOO) ₃	Dr. Madeleine Geers Uppsala University
10:30 – 10:45	FIKA / POSTERS	
“Sustainability / Energy” (Chair: Prof. Lennart Bergström, SU)		
10:45 – 11:15	Invited Talk TBA	TBA TBA
11:15 – 11:30	Photophysical Ion Dynamics in Photovoltaic Hybrid Perovskite MAPbX ₃ (X = Br, Cl) Single Crystals	Prof. Yasmine Sassa KTH Royal Institute of Technology
11:30 – 11:45	Reorientational dynamics of cations (PDA/XDA) in layered metal halide perovskites investigated with QENS	Kanming Shi Chalmers
11:45 – 12:00	Unveiling the magnetic structure of magnetocaloric Nd ₂ In using neutron diffraction	Karthika K. Thilakan Uppsala University
12:00 – 12:15	Unraveling the contrary nature of water in Prussian blue analogue cathode materials using multiple neutron scattering techniques	Ida Nielsen Uppsala University
12:15 – 13:45	LUNCH / POSTERS	
“Cultural Heritage” (Chair: Sindra Petersson Årsköld, ESS)		
13:45 – 14:15	Invited Talk Beyond the Surface: Neutron Imaging in Cultural Heritage Research	Dr. Anna Fedrigo Institut Laue-Langevin (ILL)
14:15 – 14:30	Reflections from the LINXS Heritage Science theme	Dr. Elyse Canosa The Swedish National Heritage Board
14:30 – 14:45	A tomography study of two (pre)Viking Age swords	Dr. John Ljungkvist Uppsala University
14:45 – 15:00	CSNS Energy-resolved Neutron Imaging Instrument and its applications	Prof. Jie Chen IHEP, CAS, CSNS
15:00 – 15:05	CLOSING of the MEETING + Swedish Neutron Week 2026	SwedNess (Martin Månsson) + SNSS
15:05 – ...	“Departure FIKA” (!!! Ferry leaves 16:30 !!!)	
18:00	DINNER (Only for people staying over to 12 th June!) @ Bad Wolf BBQ - Adelsgatan 1B, 621 57 Visby	

Thursday 12th June – “Student Days”

“Early-Stage Researcher (ESR) Career Day” (Chair: Dr. Samira Dorri, KTH)		
06:30 – 08:30	BREAKFAST	
08:30 – 08:50	Prof. Martin Månsson Group Leader: KTH, SMaRT Director of Studies: SwedNess	
08:50 – 09:10	Dr. Joakim Amorim Research Programmes Manager Swedish Foundation for Strategic Research (SSF)	
09:10 – 09:30	Prof. Yasmine Sassa Group Leader: QuTM KTH, Applied Physics	
09:30 – 09:50	Prof. Daniel Söderberg Head of Division / Director KTH Fibre Processes / TreeSearch	
09:50 – 10:10	Dr. Hua Lu Karlsson Expert Engineer Scania	
10:10 – 10:40	FIKA	
10:40 – 11:00	Dr. Andrew Jackson Head Neutron Instruments Division Group Leader Instrument Scientists European Spallation Source (ESS)	
11:00 – 11:20	Dr. Shun Yu Senior Research Associate Unit of Smart Materials RISE Research Institute of Sweden	
11:20 – 11:40	Dr. Mats Qvarford (TBC) Program Manager Packaging Solutions Tetra Pak®	
11:40 – 12:00	Dr. Nanna Zhou Hagström Scientist, Underwater Technology Swedish Defence Research Agency (FOI)	
12:00 – 12:20	Dr. Hamish Cavaye <i>Online</i> Instrument Scientist ISIS/STFC + Johnson Matthey	

Thursday 12th June – “Student Days” (continued)

12:20 – 14:00	LUNCH (Dagens Lunch “Matfabriken”)	
“Equal Opportunity in STEM R&D” (Chair: TBA)		
14:00 – 14:20	Introduction	Yasmine Sassa & Martin Månsson <i>KTH Royal Institute of Technology</i>
14:20 – 14:50	The Gender Perspective	
14:50 – 15:20	The Cultural Perspective	
15:20 – 15:30	Questions / Reflections	
15:30 – 15:45	FIKA ++	
15:45 – 16:00	Introduction to “way forward” 10 mins	Yasmine Sassa & Martin Månsson <i>KTH Royal Institute of Technology</i>
16:00 – 16:30	Small workgroups “Brainstorm on solutions”	
16:30 – 17:15	Group presentations + Discussions	
17:15 – 17:30	Summary	
17:30 – 17:45	Leftover FIKA + Godis	
“Life-Work Balance” (Chair: Yasmine Sassa, KTH)		
17:45 – 18:45	Finding Balance in Life: from Physics to Mountaineering	 Prof. Em. Bertram Batlogg <i>ETH Zürich</i>
19:30 – ...	DINNER @ Mille Lire - Södra Kyrkogatan 9, 621 56 Visby	

Friday 13th June – “Student Days”

Artificial Intelligence (AI) (Chair: Martin Månsson, KTH) History, Functionality, Computer-Human Interaction, & Ethics		
06:30 – 08:30	BREAKFAST	
08:30 – 10:00	AI <i>History, background, sustainability, gender perspective, ethics</i>	 Assoc. Prof. Anders Hedman <i>KTH, Royal Institute of Technology</i> <i>AI & Human-Computer Interaction</i>
10:00 – 10:30	FIKA	
10:30 – 12:00	AI <i>Technical foundation, functionalities, possibilities, & limitations</i>	 Prof. Haibo Li <i>KTH, Royal Institute of Technology</i> <i>AI & Human-Computer Interaction</i>
12:00 – 13:00	LUNCH (Dagens Lunch “Matfabriken”)	
13:00 – 13:45	AI workshop (tasks & group work)	Anders Hedman, Haibo Li & Martin Månsson <i>KTH Royal Institute of Technology</i>
13:45 – 15:00	FIKA + AI: Presentations & Concluding Remarks	Anders Hedman, Haibo Li & Martin Månsson <i>KTH Royal Institute of Technology</i>
15:00 – ...	Departure (!!! Ferry leaves 16:00 !!!)	

END OF SWEDISH NEUTRON WEEK 2025