

Program for the Fifth NBIA Meeting on ESS Science, November 9-13, 2015

Only 20 students will take part on the hand on exercises. "ESS Science: Opportunities & Ideas" session is intended to give the participants an opportunity to discuss on what they think is most important to develop a good neutron facility, including instrumentation, sample preparation laboratories, software, hardware, etc..

<i>Day/Time</i>	<i>Lecturer</i>	<i>Topic</i>
<i>Monday, 1st day</i>		
8:00 am - 9:00 am	Registration & Welcome	
9:15 am – 9:20 am	Poul Henrik Damgaard (NBIA Director)	Welcome!
9:20 am -9:45 am	Andrew Jackson (NBIA)	The Niels Bohr Legacy
9:45 am – 10:30 am	Charles M. Marcus (NBI)	Topological States in Nanowires: Experimental status and prospects
10:30 am - 11:00 am	Coffee break	
11:00 am - 11:45 am	Gerald Kneller (Centre de Biophysique Moléculaire)	Simulation-based modeling of neutron scattering data
11:45 am - 12:30 pm	Stéphane Rols (ILL)	Measuring and simulating the vibrational density of states of carbon nano-structures
12:30 pm – 2:00 pm	Lunch	
2:00 pm - 2:45 pm	Posters and coffee break	
3:00 pm - 5:00 pm	Jernej Stare (National Institute of Chemistry)	Molecular Dynamics tutorial: Students chose project, hands on exercises
3:00 pm - 5:00 pm	Visit if the QDev laboratory for the invited speakers (Charles Marcus invitation)	
<i>Tuesday, 2nd day</i>		
9:00 am - 9:45 am	Maxim Mostovoy (Zernike Institute)	Magnetic Superstructures: Crystallization of Topological Magnetic Defects
9:45 am - 10:30 am	Stefano Carreta (Università di Parma)	Unravelling the Spin dynamics and Microscopic Properties of Molecular Nanomagnets by Neutron Scattering
10:30 am - 11:00 am	Coffee break	
11:00 am - 11:45 am	Sandor Toth (PSI)	Strong magnon decay in a triangular lattice antiferromagnet
11:45 am - 12:30 pm	Thomas H. Rod (DMSC-ESS)	Data Analysis and Modeling software for the future ESS users
12:30 pm - 2:00 pm	Lunch	
2:00 pm – 2:30 pm	Dimitri Argyriou (ESS)	ESS Science: Opportunities & Ideas
2:30 pm – 4:00 pm	Sandor Toth (PSI)	Spin wave tutorial: Students chose project, hands on exercises
2:30 pm – 4:00 pm	ESS Scientists	Round Table about ESS
4:15 pm - 5:00 pm	Students clip presentations: 3 minutes clip to show their research work	
5:00 pm - 6:30 pm	Beer party and posters	

<i>Wednesday, 3rd day</i>		
9:00 am - 10:30 am	2 Students: Working groups	
10:30 am - 11:00 am	Coffee Break	
11:00 am - 11:45 am	Thomas Proffen (Oak Ridge National Laboratory)	The road from collecting neutron data to scientific result
11:45 am - 12:30 pm	Pascale P. Deen (ESS)	Emergent magnetic order and topologically complex structures
12:30 pm - 2:00 pm	Lunch	
2:00 pm - 2:45 pm	Jeroen van den Brink (Institute for Theoretical Solid State Physics)	Resonant Inelastic X-ray Scattering on high T _c cuprates and magnetic iridates
2:45 pm - 3:30 pm	Neal Skipper (UCL)	The structure of simple aromatic liquids by neutron scattering and Empirical Potential Structure Refinement (EPSR)
4:30 pm -	Museum visit (The David Collection (https://www.davidmus.dk/en)) & Conference dinner (Sponsored by the ESS) at Restaurant Brdr. Price (http://rosenborggade.brdr-price.dk/content/info)	
<i>Thursday, 4th day</i>		
9:00 am - 11:00 am	2 Students: Working groups	
11:00 am - 11:45 am	Ferdi Aryasetiawan (Lund University)	First-principles approach to the electronic structure of strongly correlated systems
11:45 am - 12:30 pm	Arantxa Arbe (CSIC-UPV/EHU)	Neutron scattering and molecular dynamics simulations: synergetic tools to unravel structure and dynamics in polymers
12:30 pm - 2:00 pm	Lunch	
2:00 pm - 4:00 pm	2 Students: Working groups	
2:00 pm - 3:00 pm	Guided tour of the Niels Bohr's Office for the senior scientists	
4:00 pm - 4:30 pm	Coffee break	
4:30 pm - 5:30 pm	2 Groups of Students (30 minutes each group)	Student presentations on their results
<i>Friday, last day</i>		
9:00 am - 9:30 am	Jernej Stare (National Institute of Chemistry)	Computational enzymology by Empirical Valence Bond simulations: amine oxidation catalyzed by monoamine oxidase
9:30 am - 10:00 am	Juergen Eckert (USF)	Dynamics of Pharmaceutical Molecules
10:00 am - 10:30 am	Coffee break	
10:30 am - 11:00 am	Heloisa N. Bordallo (NBI)	Neutrons and X-ray scattering applications on systems of biological relevance
11:00 am - 11:45 am	Poul Nissen (Aarhus University)	A biological view of neutrons
12:00 pm - 12:45 pm	Lunch	
12:45 pm - 5:30 pm	Visit to the ESS site in Lund, including lunch at the ESS and return to Copenhagen with a stop at the airport (Trip sponsored by the Institut Français)	