

NOP2017 Scientific Program

at Noh theatre

Jul. 6

9:00-9:30	Session 1 : Opening Plenary	
9:00-9:30	* The Neutron Landscape - A Personal View	Colin Carlile (Uppsala Univ.)
9:30-10:40	Session 2 : Moderator	
9:30-9:50	* Neutron Moderation: Some Recent Problems and Results	Rolando Granada (Argentine Atomic Energy Commission)
9:50-10:10	* Studying neutron moderator materials with VISION	Anibal (Timmy) Ramirez-Cuesta (Oak Ridge National Laboratory)
10:10-10:25	Development of cold (bi-spectral) neutron moderators for the IBR-2 reactor. Current status and plans.	Sergey Kulikov (Joint Institute for Nuclear Research)
10:25-10:40	Low dimensional thermal and cold finger moderator for the High Brilliance Neutron Source Jülich	Tobias Cronert (Forschungszentrum Jülich)
10:40-10:55	Coffee	
10:55-11:45	Session 3 : Down-Conversion, Reflector	
10:55-11:15	* Ultracold neutron sources	Takeyasu Ito (Los Alamos National Laboratory)
11:15-11:30	Towards the first UltraCold Neutron production at TRIUMF	Edgard PIERRE (TRIUMF)
11:30-11:45	The effect of nanodiamond fluorination on quasi-specular reflection of cold neutrons	Kirill Zhernenkov (Joint Institute for Nuclear Reserch)
11:45-13:15	Lunch	
13:15-14:35	Session 4 : Optics (reflective, refractive, diffractive and interference optics)	
13:15-13:35	* Neutron optics of non-centrosymmetric crystals and search for the neutron EDM and CP-violating interactions	Vladimir Voronin (NRC Kurchatov institute - PNPI)
13:35-13:50	Adaptive focusing optics incorporating metal substrates	Masako Yamada (Paul Scherrer Institut)
13:50-14:05	Layer morphology control in Ti/Ni multilayer mirrors by ion-assisted interface engineering and B4C doping	Jens Birch (Thin Film Physics division, Linköping University, Sweden)
14:05-14:20	Advances in Neutron Reflectometry Techniques: Coherent Summing and Refractive encoding	Robert Cubitt (Institut Laue Langevin)
14:20-14:35	Magnified Neutron Imaging with Modulating Permanent Magnet Sextupole Lens	Yoshihisa Iwashita (Kyoto University)
14:35-14:50	Coffee	
14:50-15:25	Session 5 : Neutron Medical and Industrial Applications	
14:50-15:10	* Accelerator based neutron source for BNCT	Hiroki Tanaka (Kyoto University Research Reactor Institute)
15:10-15:25	Membrane Dynamics at Solid Interfaces	Henrich Frielinghaus (Forschungszentrum Jülich GmbH)
15:25-16:30	Poster adv.	
16:30-18:00	Poster session Core time at Conference Room 1 & 2	

Jul. 7

9:00-10:10	Session 6 : Shielding, Simulator	
9:00-9:20	* Instrument Shielding and Backgrounds on High Power Spallation Sources	Phil Bentley (ESS)
9:20-9:35	Radiological Shielding Design for The Neutron High-Resolution Spectrometer EMU at The OPAL Reactor	Tunay Ersez (Australian Nuclear Science & Technology Organisation)
9:35-9:55	* MC simulations for the optimization and data analysis of fundamental physics experiments with ultracold neutrons	Geza Zsigmond (Paul Scherrer Institut)
9:55-10:10	The automatic guide optimizer guide_bot	Mads Bertelsen (University of Copenhagen)
10:10-10:25	Coffee	
10:25-11:45	Session 7 : Detector	
10:25-10:45	* A New Generation of 10Boron-based gaseous detectors	Richard Hall-Wilton (European Spallation Source ERIC)
10:45-11:00	Recent Developments of the SoNDe High-Flux Detector Project	Sebastian Jakobs (Forschungszentrum Jülich GmbH, JCNS at MLZ)
11:00-11:15	Development of one dimensional position-sensitive neutron detector using TRUST Eu:LiCAF	Hiroaki Shimizu (Nagoya University)

11:15-11:30	Development of energy-resolved neutron imaging detectors at RADEN Joseph Parker (Comprehensive Research Organization for Science and Society (CROSS))
11:30-11:45	Development of an Active Interrogation system of Special Nuclear Materials by Use of Tensioned Metastable Fluid Detector and Compact Neutron Source Based on Inertial Electrostatic Confinement Fusion Mahmoud Bakr (Institute of Advanced Energy, Kyoto University)
11:45-13:15	Lunch
13:15-13:45 Session 8 : Beam Extraction, Instruments	
13:15-13:30	The chopper of a new type and its use in a neutron experiment Vladislav Syromyatnikov (PNPI NRC)
13:30-13:45	HERITAGE: the concept of a giant flux neutron reflectometer for the exploration of 3-d structure of liquid and solid interfaces in thin films Stefan Mattauch (JCNS at MLZ, FZ-Juelich)
13:45-14:40 Session 9 : Fundamental Physics 1	
13:45-14:05	* Cold and Ultracold Neutron Optics for Fundamental Neutron Physics Albert Young (North Carolina State University)
14:05-14:25	* New Measurement of the Neutron Lifetime Christopher Morris (Los Alamos National Laboratory)
14:25-14:40	Fundamental physics activities with pulsed neutrons at J-PARC(BL05) Kenji Mishima (KEK)
14:40-14:55	Coffee
14:55-16:00 Session 10 : Fundamental Physics 2, Polarization 1	
14:55-15:10	Time-Reversal Invariance Violation in Neutron Scattering Vladimir Gudkov (University of South Carolina)
15:10-15:25	Fundamental physics using high-performance optics Masaaki Kitaguchi (Nagoya University)
15:25-15:45	* Nuclear polarization techniques and their applications to neutron spin filters Tomohiro Uesaka (RIKEN)
15:45-16:00	Spin contrast variation neutron reflectometry Takayuki Kumada (Japan Atomic Energy Agency)
16:00-16:15	Coffee
16:15-17:35 Session 11 : Polarization 2	
16:15-16:35	* Recent Progress in the use of Polarised Neutrons at ISIS Robert Dalglish (ISIS Pulsed Neutron and Muon Source)
16:35-16:50	Polarizing Neutron Optics from Helmholtz-Zentrum Berlin Thomas Krist (Helmholtz-Zentrum Berlin)
16:50-17:05	A new concept in broad-band cold neutron polarization with supermirrors Thierry Bigault (Institut Laue Langevin, Grenoble, France.)
17:05-17:20	A centralized polarized 3He based neutron polarizing system Wangchun Chen (University of Maryland/NIST)
17:20-17:35	Wide angle polarization analysis with a 3He neutron Spin Filter for TOPAS: Test of the Magic PASTIS on V20 and NEAT at HZB Zahir Salhi (Jülich Centre for Neutron Science at MLZ (JCNS@MLZ))

Jul. 8

9:00-9:50 Session 12 : Imaging, Instruments, & Application	
9:00-9:20	* Magnetic field imaging using pulsed polarized neutrons Takenao Shinohara (JAEA)
9:20-9:35	Non-standard configuration of SANS instruments: Multiple-beam techniques for VSANS and scanning neutron imaging methods Charles Dewhurst (Institut Laue Langevin)
9:35-9:50	Current status and perspective of neutron resonance spin echo Masahiro Hino (Research Reactor Institute, Kyoto University)
9:50-10:05 Coffee	
10:05-11:10 Session 13 : Compact Source & Application	
10:05-10:25	* Development of safe and easy-to-use compact accelerator-driven neutron source Yutaka Yamagata (RIKEN)
10:25-10:40	The Jülich High Brilliance Neutron Source Project - A challenge for neutron optics Thomas Gutberlet (Jülich Centre for Neutron Science, Forschungszentrum Jülich GmbH)
10:40-10:55	Compact neutron system on site-RANS and its industrial application and social infrastructure safety Yoshie OTAKE (RIKEN)
10:55-11:10	Performances of neutron scattering experiments at low power CANS Paul Zakalek (Forschungszentrum Jülich GmbH)
11:10-11:40 Session 14 : Closing Summary	
11:10-11:25	* Closing Summary 1 Peter Geltenbort (Institut Laue Langevin)
11:25-11:40	* Closing Summary 2 Winfried Petry (TUM)

* Invited Speaker