Sunday 26 March 2017

16:00-20:00	**Conference opens and registration** *St Anne's College, University of Oxford*
18:00-20:00	**Welcome reception** *Ruth Deach Foyer, St Anne's College*

Monday 27 March 2017

08:00	**Registration** *Entrance Hall (East Wing), Said College, University of Oxford*		
09:00	**Welcome address** *Nelson Mandela Lecture Theatre, Said College*		
09:20	**(plenary) ISIS – the next 20 years** Robert McGreevy, Science and Technology Facilities Council - ISIS, UK		
09:45	**(plenary) CSNS Project Construction** Shinian Fu, Neutron Science Center, Institute of High Energy Physics - CAS, China		
10:10	**(plenary) SINQ - 20 years of operational experience with the Swiss spallation neutron source** Bertrand Blau, PSI -Paul Scherrer Institut, Switzerland		
10:35	**(plenary) Status of the Oak Ridge National Laboratory Spallation Neutron Source** Ken Herwig, Oak Ridge National Laboratory, USA		
11:00	**Refreshments** *Entrance Hall (East Wing), Said College*		
	Instrument Design 1 *Rhodes Trust Lecture Theatre*	**Targets 1** *Nelson Mandela Lecture Theare*	**Detectors 1** *Edmond Safra Lecture Theatre*
11:20	**Improved nuclear forensics, radiochemical diagnostics, and nuclear astrophysics via total-cross-section measurements at the Los Alamos Neutron Science Center** Paul Koehler, Los Alamos National Laboratory, USA	**The ESS Target Vessel design, prototyping and inspection** Fernando Sordo Balbín, Consorcio ESS-BILBAO, Spain	**Realising the detector baseline for the ESS instrument suite** Richard Hall-Wilton, European Spallation Source ERIC, Sweden
11:45	**Progress in isotopic quantification and mapping in metals and ceramics at LANSCE** Mark Bourke, LANL, USA	**ISIS TS1 project Target – Design for Manufacture** Leslie Jones, Science and Technology Facilities Council - ISIS, UK	**The potential of boron coated straw tubes as replacement 3He detector technology at ISIS** Davide Raspino, Science and Technology Facilities Council, UK
12:10	**Installation status and commissioning activities of the neutron imaging instrument IMAT at ISIS** Winfried Kockelmann, Science and Technology Facilities Council - Rutherford Appleton Laboratory, UK	**CERN's n_TOF neutron spallation target operating experience and design of the new spallation target** Marco Calviani, CERN, Switzerland	**Performance of the multi-grid detector on the time-of-flight spectrometer CNCS at SNS** Anton Khaplanov, European Spallation Source ERIC, Sweden
12:35	**Lunch and exhibition** *Entrance Hall (East Wing), Said College*		

Monday 27 March 2017

	Instrument Design 1 *Rhodes Trust Lecture Theatre*	Targets 1 *Nelson Mandela Lecture Theatre*	Detectors 1 *Edmond Safra Lecture Theatre*
14:00	**Gamma-ray background characterisation of neutron beamlines at the ISIS Neutron Spallation Source** Giulia Festa, Museo Storico della Fisica e Centro Studi e Ricerche Enrico Fermi, Italy	**Numerical flow simulation of the neutron source SINQ of PSI** Sven Jollet, PSI - Paul Scherrer Institute, Switzerland	**New simulation tools and reproduction of CNCS results using Geant4** Eszter Dian, European Spallation Source ERIC, Sweden
14:25	**Progress on LoKI - the broad band SANS at ESS** Andrew Jackson, European Spallation Source, Sweden	**Stress analysis on re-designed mercury target vessel for spallation neutron source of J-PARC** Katsuhiro Haga, Japan Atomic Energy Agency, Japan	**Neutron detection in a high rate environment, with reflectometry at ESS as an example** Francesco Piscitelli, European Spallation Source ERIC, Sweden
14:50	**Discussion**	**Discussion**	**Discussion**
15:40	**Refreshments** *Entrance Hall (East Wing), Said College*		
16:00	**(Plenary) IBR-2M: Five Years After Modernization** Alexander Belushkin, Joint Institute for Nuclear Research, Russia *Nelson Mandela Lecture Theatre, Said College*		
16:25	**(Plenary) Current status of J-PARC Materials and Life Sciences Facility** Kenji Nakajima, J-PARC Center, Japan		
16:50	**(Plenary) The European Spallation Source** John Womersley, European Spallation Source, Sweden		
17:15	**(Plenary) LANSCE Accelerator Update and Future Plans** Robert Garnett, Los Alamos National Laboratory, USA		
17:40	**Group Photo**		

Tuesday 28 March 2017

ICANS XXII Oxford 2017

	Instrument Design 2 *Rhodes Trust Lecture Theatre*	Targets 2 *Nelson Mandela Lecture Theatre*	Neutronics 1 *Lecture Theatre 4*	Guides and Optics 1 *Edmond Safra Lecture Theatre*
09:00	**The Engineering Diffractometer BEER at ESS** Jochen Fenske, Helmholtz-Zentrum Geesthacht, Germany	**Initial Implementation of Helium Gas into the SNS Mercury Target for Mitigation of Fatigue and Cavitation Damage** Peter Rosenblad, Spallation Neutron Source / Oak Ridge National Laboratory, USA	**The SNS moderator demonstration facility** Erik Iverson, Spallation Neutron Source / Oak Ridge National Laboratory, USA	**Real time neutron beam transport modelling via a heterogeneous approach** Phil Bentley, European Spallation Source, Sweden
09:25	**The DREAM Diffractometer at European Spallation Source** Mikhail Feygenson, Jülich Centre for Neutron Science, Germany	**Target Helium Purification Systems - Requirements and Solutions** Per Nilsson, European Spallation Source, Sweden	**Neutronics calculations for the UCN source at PSI with scattering libraries at very low < 10 K temperatures** Geza Zsigmond, Paul Scherrer Institut, Switzerland	**Neutron guide upgrade at SINQ** Uwe Filges, Paul Scherrer Institut, Switzerland
09:50	**Study of the NMX instruments at ESS** Valentina Santoro, European Spallation Source, Sweden	**Design and Optimisation of the ISIS TS1 project Target** Dan Wilcox, Science and Technology Facilities Council - Rutherford Appleton Laboratory, UK	**Activation of the ISIS muon beamline and corresponding gamma dose rates - Simulations versus experimental results** Goran Skoro, ISIS Neutron and Muon Source / Science and Technology Facilities Council, UK	**Variable focusing system: A telephoto lens for neutrons** Christian Schanzer, SwissNeutronics AG, Switzerland
10:15	**Developing diamond anvil cell capabilities on PEARL** Christopher Ridley, Science and Technology Facilities Council, UK	**ESS Target Water Cooling, Purification and Radiolysis Gas Handling** Håkan Carlsson, European Spallation Source, Sweden	**Neutron beam extraction and tailoring useful neutrons to instruments** Masatoshi Arai, European Spallation Source, Sweden	**Design of the neutron guide system for the PIK reactor** Peter Konik, Petersburg Nuclear Physic Institute, Russia
10:40	**Refreshments** *Entrance Hall (East Wing), Said College*			
	Instrument Design 3 *Rhodes Trust Lecture Theatre*	**Targets 2** *Nelson Mandela Lecture Theatre*	**Neutronics 1** *Lecture Theatre 4*	**Guides and Optics 1** *Edmond Safra Lecture Theatre*
11:00	**The Mushroom - a neutron spectrometer with a difference** Robert Bewley, Science Technology Facilities Council -ISIS, UK	**Target facility for ADS in J-PARC** Shin-ichiro Meigo, JAEA/J-PARC, Japan	**Basic feature of the time structure of fast neutron background at pulse spallation sources** Valentina Santoro, European Spallation Source, Sweden	**A selene-type design for the amor reflectometer** Christine Klauser, Paul Scherrer Institut, Switzerland
11:25	**Spectrometer concepts for medium flux compact neutron sources** Jörg Voigt, Forschungszentrum Jülich GmbH, Germany	**ISIS TS1 project Summary** Stephen Gallimore, Science and Technology Facilities Council / ISIS, UK	**Progress of the commissioning of a fast neutron beamline for chip irradiation** Carlo Cazzaniga, STFC - Rutherford Appleton Laboratory, UK	**Bi-spectral beam extraction and neutron transport simulations for BEER@ESS** Jan Saroun, Nuclear Physics Institute of the CAS, Czech Republic
11:50	**The route towards Epithermal Neutron Station** Matthew Krzystyniak, Rutherford Appleton Laboratory, UK	**SNS mercury target design optimization** Peter Rosenblad, Oak Ridge National Laboratory, USA	**Discussion**	**Discussion**
12:15	**T-REX: Time-of-flight Reciprocal space Explorer at the ESS source** Nicolò Violini, Forschungszentrum Jülich GmbH, Germany	**Discussion**		
12:40	**Lunch and exhibition** *Entrance Hall (East Wing), Said College*			

Tuesday 28 March 2017

	Moderator 1 *Nelson Mandela Lecture Theatre*	Data analysis and computing 1 *Lecture Theatre 4*	Compact neutron sources 1 *Rhodes Trust Lecture Theatre*	Safety, compliance and radiological issues 1 *Edmond Safra Lecture Theatre*
14:00	**Cryogenic cold neutron moderator (CM 201) for central direction of IBR – 2 puls reactor. Cryogenic system for complex of cold moderators** Konstantin Mukhin, Joint Institute for Nuclear Research, Russia	**Towards realtime data treatment and visualization from next generation facilities** Jonathan Taylor, European Spallation Source, Sweden	**Progress of compact neutron source activities in Japan - Japan Collaboration for Accelerator driven Neutron Sources (JCANS) status** Yoshiaki Kiyanagi, Nagoya University, Japan	**Radiation safety analysis for the ESS target station** Linda Coney, European Spallation Source, Sweden
14:25	**Talk title tbc** Speaker tbc	**Towards holistic data processing for the user** Garrett Granroth, Oak Ridge National Laboratory, USA	**The Frascati Neutron Generator** Stefano Loreti, ENEA Department of Fusion and technologies for Nuclear Safety and Security, Italy	**ESS personnel safety systems test stand** Denis Paulic, European Spallation Source, Sweden
14:50	**Implementation of a small-angle scattering model in MCNPX for very cold neutron reflector studies** Franz Gallmeier, Oak Ridge National Laboratory, USA	**Linking data reduction and data analysis with mantid** Andres Markvardsen, Science and Technology Facilities Council - ISIS Facility, UK	**The Homogeneous Thermal Neutron Source at ENEA-Frascati** Antonio Pietropaolo, INFN-Frascati National Laboratories, Italy	**ESS target station ventilation - Managing radiation hazards** Andrea Polato, European Spallation Source, Sweden
15:15	**Present fabrication status of spare moderators and reflector in J-PARC spallation neutron source** MakotoTeshigawara, Japan Atomic Energy Agency, Japan	**Proof-of-concept for real-time data analysis at the European Spallation Source** Celine Durniak, The European Spallation Source ERIC, Denmark	**Status report on accelerator and neutron activities of CPHS at Tsinghua University** Xuewu Wang, Tsinghua University, China	**Prognostication of the radiation resistance of various materials on the facility for radiation investigations at the IBR-2 reactor** Maksim Bulavin, JINR, Russia
15:40	**Refreshments** *Entrance Hall (East Wing), Said College*			
	Moderator 1 *Nelson Mandela Lecture Theatre*	**Data analysis and computing 1** *Lecture Theatre 4*	**Compact neutron sources 1** *Rhodes Trust Lecture Theatre*	**Safety, compliance and radiological issues 1** *Edmond Safra Lecture Theatre*
16:00	**Redesign of the Lujan Center Neutron Spallation Source for Optimization of the Neutron Flux in the 0.001 – 1 MeV Energy Range** Michael Mocko, Los Alamos National Laboratory, USA	**Pan-European cooperation on data treatment software in SINE2020** Thomas Holm Rod, European Spallation Source ERIC, Denmark	**Tailoring instruments, moderators and the accelerator for the Hokkaido University CANS** Michihiro Furusaka, Hokkaido University, Japan	**ESS Environmental Impact Assessment** Daniela Ene, European Spallation Source, Sweden
16:25	**The neutron moderators for the European Spallation Source** Luca Zanini, European Spallation Source, Sweden	**SasView v4 - Data analysis for small angle scattering** Andrew Jackson, European Spallation Source, Sweden	**The LENS facility in 2017** David Baxter, Indiana University, USA	**Off-gas processing system operations for mercury target vessel replacement at J-PARC** Tetsuya Kai, Japan Atomic Energy Agency, Japan
16:50	**Fast neutron emission and signal to noise ratio for novel, low-dimensional moderators** Ferenc Mezei, European Spallation Source, Sweden	**Implementation of bayesian data analysis tool FABADA for interpreting QENS experiments** Sanghamitra Mukhopadhyay, ISIS Facility - Rutherford Appleton Laboratory, UK	**Design of multi-pinhole collimator system for SANS based on CPHS neutron source** Zhiyuan Wang, Tsinghua University, China	**Tritium permeation from the primary helium loop for the target cooling at ESS** Yong Joong Lee, European Spallation Source, Sweden
17:15	**Discussion**	**Discussion**	**Discussion**	**Discussion**
17:45	**Break**			
19:30 - 22:00	**Conference dinner** *Christ Church College, University of Oxford*			

Wednesday 29 March 2017

	Moderator 2 *Nelson Mandela Lecture Theatre*	Compact neutron sources 2 *Rhodes Trust Lecture Theatre*	Detectors 2 *Edmond Safra Lecture Theatre*
09:00	**Status of In-Situ Hydrogen Ortho-Para Measurement Technique** Eron Kerstiens, Los Alamos National Laboratory, USA	**Research opportunities with compact accelerator-driven neutron sources** Chun Loong, U. Rome Tor Vergata, Italy	**Detectors for second-target-station at the US spallation neutron source** Jason Hodges, Oak Ridges National Laboratory, USA
09:25	**Direct measurement of proportion of H2 para/ortho isomers in liquid hydrogen moderators at ISIS** Giovanni Romanelli, Science and Technology Facilities Council / ISIS Facility, UK	**The Jülich high brilliance neutron source project** Thomas Gutberlet, Jülich Centre for Neutron Science, Germany	**Development of position-sensitive scintillation neutron detector for a new protein crystal diffractometer at J-PARC MLF** Tatsuya Nakamura, Japan Atomic Energy Agency, Japan
09:50	**Current status of the study of the catalytic properties of IONEX® and OXISORB® for the conversion of liquid ortho- to parahydrogen** Monika Hartl, European Spallation Source, Sweden	**Development of a compact neutron source based on high-intensity proton beams of energy less than 20 MeV using the Geant4 simulation toolki** Ngoc Hoang Tran, Laboratoire Etudes et Applications des Réactions Nucléaires (CEA-Saclay) – Irfu/SPhN, France	**Current status of scintillation detector development at ISIS** Jeff Sykora, Science and Technology Facilities Council, UK
10:15	**Raman Spectroscopy as an Ortho-Para Diagnostic of Liquid Hydrogen Moderators** Chad Gillis, Oak Ridge National Laboratory, USA	**The Legnaro Integrated Neutron Sources suite** Luxa Silvestrin, University of Padova, Italy	**Replacing complex detector electronics with scalable software solutions** Tobias Richter, European Spallation Source ERIC, Denmark
10:40	**Refreshments** *Entrance Hall (East Wing), Said College*		
	Moderator 2 *Nelson Mandela Lecture Theatre*	**Compact neutron sources 2** *Rhodes Trust Lecture Theatre*	**Detectors 2** *Edmond Safra Lecture Theatre*
11:00	**Spin isomers in the ISIS TS1 cryogenic hydrogen moderator** Molly Probert, Science and Technology Facilities Council, UK	**Performances of neutron scattering spectrometers on a compact neutron source** Frederic Ott, Laboratoire Léon Brillouin CEA/CNRS, France	**Development of a target imaging system for the European Spallation Source** Nicolò Borghi, Technical University of Denmark (DTU), Denmark
11:25	**Lifecycle of the ESS moderator and reflector plug system** Marc Kickulies, European Spallation Source, Sweden	**General use of low-dimensional moderators in neutron sources** Luca Zanini, European Spallation Source, Sweden	**Characterization of thermal neutron beam monitors** Fatima Issa, European Spallation Source, Sweden
11:50	**Discussion**	**Discussion**	**Discussion**
12:20 - 14:00	**Lunch and poster session I** *Entrance Hall (East Wing), Said College*		
14:15	Coaches depart Said College for Blenheim Palace		
15:00	**Tours of Blenheim Palace**		
17:00	Coaches depart Blenheim Palace		
17:30	Coaches arrive at Said College		

Thursday 30 March 2017

	Moderator 3 *Nelson Mandela Lecture Theatre*	Instrument Design 4 *Rhodes Trust Lecture Theatre*	Shielding 1 *Edmond Safra Lecture Theatre*
09:00	**Characterization of a liquid ammonia moderator** Erik Iverson, SNS / Oak Ridge National Laboratory, UK	**CSPEC - the cold time of flight spectrometer for the ESS** Pascale Deen, European Spallation Source, Sweden	**Shielding of the ESS target station connection cell** Günter Muhrer, European Spallation Source, Sweden
09:25	**Neutron poison burnout and effects on SNS moderator performance** Franz X. Gallmeier, Oak Ridge National Laboratory, USA	**The TOSCA spectrometer at ISIS: The recent guide upgrade and beyond** Roberto Pinna, Science & Technology Facilities Council, UK	**Development and design of the neutron beam extraction system at ESS** Sara Ghatnekar Nilsson, European Spallation Source, Sweden
09:50	**Demonstration of a single-crystal reflector-filter for enhancing slow neutron beams** Günter Muhrer, European Spallation Source ERIC, Sweden	**High resolution chopper spectrometer HRC and neutron Brillouin scattering** Shinichi Itoh, High Energy Accelerator Research Organization, Japan	**Neutron field spectrometry at SINQ using bonner sphere spectrometer** Masako Yamada, PSI, Switzerland
10:15	**Proposed design options for the next-generation Lujan Target Moderator Reflector Shield assembly** Michael Mocko, Los Alamos National Laboratory, USA		**Shielding beamlines in the common neutron bunker at ESS** Douglas Di Julio, European Spallation Source, Sweden
10:40	**Refreshments** *Entrance Hall (East Wing), Said College*		
	Moderator 3 *Nelson Mandela Lecture Theatre*	**Instrument Design 4** *Rhodes Trust Lecture Theatre*	**Shielding 1** *Edmond Safra Lecture Theatre*
11:00	**The neutronic characterisation of ISIS TS1** Robert Bewley, Science and Technologies Facilities Council - ISIS, UK	**ToF-Backscattering at the ISIS Facility: Status and perspectives** Franz Demmel, Science and Technology Facilities Council, UK	**Shielding of the ESS D2T section** Riccardo Bevilacqua, ESS, Sweden
11:25	**Development of cold (bi-spectral) neutron moderators for the IBR-2 pulsed reactor. Current status and plans** Sergey Kulikov, Joint Institute for Nuclear Research, Russia	**Background optimization of the time-of-flight spectrometer NEAT** Gerrit Günther, Helmholtz Zentrum Berlin, Germany	**A B4C-Polyethylene based concrete for enhanced neutron shielding: Neutronic and mechanical properties** Douglas Di Julio, ESS, Sweden
11:50	**Developments of the Moderator & Reflector Systems for European Spallation Source** Daniel Lyngh, European Spallation Source ERIC, Sweden	**Ultra-high resolution neutron scattering techniques implemented by superconducting magnetic Wollaston prisms** Roger Pynn, Indiana University, USA	**Discussion**
12:15	**Discussion**	**Discussion**	
13:00	**Lunch** *Entrance Hall (East Wing), Said College*		

Thursday 30 March 2017

	Targets 3 *Nelson Mandela Lecture Theatre*	Data analysis and computing 2 *Lecture Theatre 4*	No session
14:00	**SNS Second Target Station Project Status** John Galambos, Oak Ridge National Laboratory, USA	**The ESS instrument integration platform ESSIIP: Prototyping the control system for neutron scattering instruments at ESS** Thomas Gahl, European Spallation Source, Sweden	
14:25	**ISIS Target Station One Project–An overview of the development work being undertaken to improve the Target, Moderator And Reflector TRAM support systems** Daniel Coates, Science Technology Facilities Council, UK	**A new design for live neutron event data visualisation for ISIS and ESS** Matthew Jones, Science and Technology Facilities Council /Tessella, UK	
14:50	**ESS Proton Beam Window design update** Raúl Vivanco, ESS-Bilbao, Spain	**Unified chopper control integration using EPICS environment and its first application at the ESS** Andrés Quintanilla, European Spallation Source, Sweden	
15:15	**Status update on the design and construction of the Active Cells Facility and Remote Handling Systems** Magnus Gohran, European Spallation Source ERIC, Sweden	**On connecting and validating simulation tools for instrument and shielding simulations including background estimates** Erik Bergbäck Knudsen, DTU Physics, Denmark	
15:40	**Refrehments** *Entrance Hall (East Wing), Said College*		
	Targets 3 *Nelson Mandela Lecture Theatre*	**Data analysis and computing 2** *Lecture Theatre 4*	**IAC Meeting (closed/invited)** *Edmond Safra Lecture Theatre*
16:00	**Design and Manufacturing of Aluminium Capsule for BLIP irradiation campaign** Yong Joong Lee, European Spallation Source ERIC, Sweden	**New development in the McStas Monte Carlo ray-tracing project** Peter Willendrup, DTU Physics, Denmark	
16:25	**Talk title tbc** Speaker tbc	**McStas Union components for simulating multiple scattering in complex geometries** Mads Bertelsen, University of Copenhagen, Denmark	
16:50	**The neutron Irradiation Module at the European Spallation Source ESS** Roberto Senesi, Università degli Studi di Roma Ter Vergata, Italy	**Discussion**	
17:15	**Discussion**		**IAC Meeting (closed/invited)**
18:00 - 19:40	**Poster session II** *Entrance Hall (East Wing), Said College*		

Friday 31 March 2017

	Neutronics 2 *Lecture Theatre 4*	Targets 3 *Nelson Mandela Lecture Theatre*	Instrument Design 5 *Rhodes Trust Lecture Theatre*
09:00	**New neutron scattering kernels for liquid hydrogen and deuterium** Rolando Granada, Argentine Atomic Energy Commission, Argentina	**Beam power nonlinearity: twice the power, but not twice the neutrons?** Thomas Huegle, Oak Ridge National Laboratory, USA	**Talk title tbc** Speaker tbc
09:25	**Benchmarking the neutron inelastic scattering model in NCrystal** Xiao-Xiao Cai, European Spallation Source / DTU, Denmark	**Neutron Reflector using Diamond Nano Particle** Kenji Mishima, KEK, Japan	**The magnetic field integral in angular Larmor labeling RF coils** Steven Parnell, TU Delft, Netherlands
09:50	**Fast automatic angular dependent weight window generation for Monte-Carlo beamline models** Stuart Ansell, European Spallation Source, Sweden	**Ultimte parameters of fission based pulsed neutron sources** Evgeny Shabalin, Joint Institute for Nuclear Research, Russia	
10:15	**Refreshments** *Entrance Hall (East Wing), Said College*		
	Neutronics 2 *Lecture Theatre 4*	**Targets 3** *Nelson Mandela Lecture Theatre*	**Instrument Design 5** *Rhodes Trust Lecture Theatre*
10:35	**Preliminary thermal neutron cross section libraries for liquid ethane** Rolando Granada, Argentine Atomic Energy Commission, Argentina	**Update on progress for the ESS Target Station construction project** Rikard Linander, European Spallation Source, Sweden	**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, FZ-Juelich, Germany
11:00	**Discussion**	**Discussion**	**Discussion**
11:30	**Closing remarks** *Nelson Mandela Lecture Theatre*		
12:00 - 12:30	**Packed Lunch** *Entrance Hall (East Wing), Said College*		
12:30	**Coaches depart from Said Business School**		
13:30 - 14:30	**(Optional) Tours of the ISIS Neutron and Muon Source**		
14:45	**Coaches depart from ISIS Neutron and Muon Source**		
15:30	**Coaches arrive at Said Business School and St Anne's College**		