

Monday 8 July 2019



09:00	<b>Welcome address</b> <b>Plenary session 1</b> <b>Bruxelles room</b>
09:15	<a href="#">The development of Compact Neutron Sources</a> John Carpenter
09:50	<a href="#">A Personal Reflection on Target Moderator Reflector Design Considerations for CANS Facilities</a> David Baxter
10:30	Coffee break
11:00	<b>Particle accelerators: a powerful tool for interdisciplinary research</b> Anne-Isabelle Etienvre
11:30	<b>Low-dimensional moderators for high-power and compact sources</b> Luca Zanini
12:00	<b>Progress of Neutron Sources and Opportunities for CANSs in China</b> Xuewu WANG

12:30 Lunch

	<b>ACCELERATOR 1</b> <b>Berlin room</b>	<b>NEUTRON SCATTERING</b> <b>Athènes room</b>	<b>TARGET 1</b> <b>Bruxelles room</b>
14:00	<b>Replacement of the primary electron beam accelerator at Hokkaido University neutron source facility</b> Takashi Kamiyama	<b>Neutron Diffraction Bulk Texture Measurement using Compact Neutron Source</b> Pingguang Xu	<a href="#">Development of a regenerated Beryllium target and a thermal test facility for Compact Accelerator-based Neutron Sources</a> J.F. Muraz
14:25	<b>Fast and Moderated DD and DT Neutron Sources and Applications</b> Jay Cremer	<b>Construction of SANS instrument ib-SAS at RANS.</b> S. Koizumi	<b>Target Concept for the High Brilliance Neutron Source</b> Paul-Emmanuel Doege
14:50	<b>An e-linac based photoneutron source designed for various neutron applications</b> Yigang Yang	<a href="#">Molecular Spectroscopy at ISIS; Synergies &amp; Opportunities with Medium &amp; Compact Neutron Sources</a> Felix Fernandez-Alonso	<a href="#">Internally-cooled target design to achieve high power density in a CANS target</a> Johannes Baggemann
15:15	<a href="#">IPHI, a high intensity proton accelerator for neutron production</a>	<b>Study of a collimation method as a nondestructive diagnostic technique by NPGA for salt distribution in concrete structures at RANS</b>	<b>A solid Beryllium target for SONATE</b>

Nicolas Chauvin

Yasuo Wakabayashi

Burkhard Annighofer



## Monday 8 July 2019 (continued)

15:40	Coffee break		
	<b>ACCELERATOR 2</b> <i>Berlin room</i>	<b>RADIOGRAPHY</b> <i>Athènes room</i>	<b>TARGET 2</b> <i>Bruxelles room</i>
16:10	<a href="#">Development of the radio frequency quadrupole proton linac for ESS-Bilbao</a> J.L. Munoz	<b>Combining fast neutron radiography with positron emission particle tracking in a tumbling mill system</b> Graham Daniels (Cancelled)	<b>diffusion bonding technologies to enhance cooling efficiency and reliability of proton beam targets and dumps at CERN</b> Josep Busom Descarrega (Cancelled)
16:35	<b>GENESIS : a fast neutrons platform</b> Benjamin Cheymol	<a href="#">Design and Construction of Imaging beamline at Nagoya University Neutron Source (NUANS BL2)</a> Katsuya Hirota	<a href="#">DIFFUSION BONDED Be NEUTRON TARGET USING 8MeV PROTON BEAM</a> T. Kurihara
17:00	<b>Proton beam multiplexer developments for multi-target operation at the High Brilliance Source HBS</b> Marius Rimmler	<a href="#">Status report on development of a compact D-D neutron generator and fast neutron detection/imaging capabilities at ETH/PSI</a> Robert Adams	<b>Tuning of target / moderator / reflector unit for optimized instrumentation at compact accelerator driven neutron sources</b> Paul Zakalek
17:25		<b>Magnified imaging by cold neutrons using refractive optics</b> Y. Iwashita	<b>Real-time neutron beam monitor with single moderator spectrometers</b> Roberto Bedogni

## Tuesday 09 July 2019

	<b>Plenary session 2</b> <i>Bruxelles room</i>		
09:00	<a href="#">RIKEN Accelerator-driven compact neutron systems</a> Yoshié Otake		
09:50	<a href="#">Instrumentation on CANS vs other facilities</a> Alain Menelle		
10:30	<b>POSTER SESSION 1</b> and coffee break <i>Oslo room</i>		
11:30	<a href="#">Studies on reflector materials for cold neutrons</a>		

Rolando Granada

12:00 **A 50 kW Liquid-Lithium Target for BNCT and Material-Science Applications**

Ido Silverman

## Tuesday 09 July 2019 (continued)



12:30 Lunch

**ISOTOPE AND NUCLEAR DATA**  
[Berlin room](#)

**DETECTION 1**  
[Athènes room](#)

**MODERATORS 1**  
[Bruxelles room](#)

14:00

**Nuclear data evaluation of neutron-induced reactions on Pu isotopes**

Hairui Guo

**Measurement methods of Single Event Upset cross section depending on neutron energy for diffusion of soft error test using CANS**

H. Iwashita

**A proto-type cold neutron source at RANS and applications using it**

Yutaka Yamagata

14:25

**Nucleon Scattering Analysis for Tungsten isotopes by a Regional dispersive optical potential**

Weili Sun

[Hybrid boron-10 gaseous detector for slow and fast neutron simultaneous detection](#)

Potashev Stanislav

[Deuterated clathrate hydrates for neutron moderation and reflection in future high-flux sources of very cold neutrons](#)

Oliver Zimmer

14:50

**POSTER SESSION 2 and coffee break**  
[Oslo room](#)

**MEDICAL APPLICATIONS**  
[Berlin room](#)

**e\_LiBANS project: thermal and epithermal neutron sources based on a medical-type electron Linac**

Valeria Monti

**DETECTION 2**  
[Athènes room](#)

**Fast neutron spectroscopy, Targets and Moderators for Compact Accelerator Neutron Sources**

Daniel Santos

**MODERATORS 2**  
[Bruxelles room](#)

**Directional reflection of Cold Neutrons using Nanodiamond Particles for Compact Neutron Sources**

Mostafa Jamalipour

16:25

**Simulation and Design of electron accelerator-based photoneutron source for BNCT**

Ruiqin Zhang

**The research of a Boron-lined Honeycomb Converter based Neutron Detector**

Yigang Yang

[Cryostat for the provision of liquid hydrogen with variable ortho-para-ratio for a low-dimensional cold neutron moderator](#)

Sebastian Eisenhut

16:50

**Neutron beam performance of iBNCT as the linac-based neutron source for BNCT in University of Tsukuba**

Hiroaki Kumada

**Completion in the ITU-T's standardization of Soft Error Test of network equipment using Compact Accelerator-driven Neutron Sources**

Genaro Funatsu

[Slab geometry type cold neutron moderator development based on neutronic study for Riken Accelerator-driven compact Neutron Source \(RANS\)](#)

Baolong Ma

17:15

[Energy and Flux Measurement of Monochromatic Fast Neutrons with Cs<sub>2</sub>LiYCl<sub>6</sub>:Ce \(CLYC\) Detectors](#)

Pilsoo Lee

**Neutron Characteristics of Cold Neutron Moderators in the Composition of the Target Station for CNS «DARIA»**

Nikita Kovalenko

20:00

**Conference Dinner on the Seine**

## Wednesday 10 July 2019



### **Plenary session 3**

**Bruxelles room**

09:00

[The High Brilliance Neutron Source \(HBS\) Project](#)

Thomas Brückel

09:50

**LvB project: progress and early instrumentation concepts**

Ferenc Mezei

10:30

Coffee break

11:00

[Characterization of Neutron Beam Applications](#)

H.M. Shimizu

11:30

[CANS Projects and Innovative instrumentation](#)

Ulrich Rücker

12:00

**Development of a Sealed Lithium Target for Nagoya BNCT System**

Sachiko Yoshihashi

12:30

Lunch

14:00

**Round Table**

**Bruxelles room**

Invited : Ian Swainson (IAEA)

, Jose-Luis Martinez (ESFRI )

, Y. Kivanagi (Japan case)

### **Plenary session 4**

**Bruxelles room**

15:00

**Short-Pulse Laser-Driven Moderated Neutron Source**

Sven C. Vogel

15:25

**Photo-neutron production in laser driven proton neutron sources**

Steven Lilley

15:40 Coffee break

## Wednesday 10 July 2019

16:10

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### **CANS Projects**

#### **Bruxelles room**

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#### ***Newly constructed compact accelerator-based neutron facility at AIST***

Koichi Kino

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#### **Neutron-related Activities and Future Plan at KOMAC**

Han-Sung Kim

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#### ***From micro- to macro-sources: The Lund Broad-band Neutron Facility***

Hanno Perrey

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#### **The Legnaro fast-neutron facility NePIR**

Pierfrancesco Mastinu

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#### ***Russian initiative on compact neutron source DARIA***

Konstantin Pavlov

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#### **The SONATE project , a French CANS for Material Sciences**

Frederic OTT

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#### ***UppCANS: Bringing neutrons to the users***

Max Wolff

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## Thursday 11 July 2019

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8:45 - 9:00 Transport to Saclay center (25km from Paris)

9:45 - 12:00 ***Visit of the LLB and IPHI***

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12:00 - 12:30 Return to Paris

## Poster session 1

<b>P1.1</b>	Noirez Laurence	<a href="#">Using Light to see Neutrons: a new 2D detector with high resolution.</a>
<b>P1.2</b>	Thomsen Knud	<a href="#">Scalable Neutron Imaging Systems at Compact Sources</a>
<b>P1.3</b>	Granada Rolando	<a href="#">Scattering Kernel and neutron transport properties of nanodiamond particles at slow neutron energies</a>
<b>P1.4</b>	T. Hosobata	Assembly Techniques for Segmented Neutron-focusing Supermirrors
<b>P1.5</b>	Tao Ye (Cancelled)	Neutron beam generated by high intensity laser pulse
<b>P1.6</b>	S. Tasaki	<a href="#">Study on Moderation Properties of Cold Mesitylene using KUANS</a>
<b>P1.7</b>	Gao Yong	The Application of Ti/Pd Film Coatings in Neutron Tube
<b>P1.8</b>	Su Zhengxiong	First-principles investigation hydrogen interaction with defects in Ti-H system
<b>P1.9</b>	Eliyahu Ilan	<a href="#">High Power Beam Dump for SARAF Phase II</a>
<b>P1.10</b>	Li Jingjing	<a href="#">Preliminary radiation shielding design for HBS</a>
<b>P1.11</b>	F. Funama	Development of new small-angle neutron scattering geometry with ring-shaped collimated beam for compact neutron source
<b>P1.12</b>	Binbin Tian	Linear scan CT with fast neutron for large-scale, long-straight reinforced concrete members nondestructive inspection
<b>P1.13</b>	R. Uemoto	Development of a Neutron Spectrum Measurement Method for Steady-state Neutron Sources
<b>P1.14</b>	Hu Jiaqi	<a href="#">Nuclear data Calculation and Analysis for n+64Zn and p+7Li Reactions</a>
<b>P1.15</b>	Matveev Vasili I. Swainson	The study of the possibility of using Ti/Co bilayers to improve polarizing supermirrors <a href="#">IAEA activities in accelerator-based neutron production</a>

## Poster session 2

<b>P2.1</b>	Yu Yangyi	<a href="#">A study of 4-dimensional point neutron source based on the (e,n) reaction</a>
<b>P2.2</b>	Stefanik Milan	<a href="#">High-power TR-24 cyclotron-based p-n convertor cooled by submerged orifice jet.</a>
<b>P2.3</b>	Wu Huarui	Development of neutron-focusing mirrors at Compact Pulsed Hadron
<b>P2.4</b>	Mingfei Yan	<a href="#">Reconstruction on fast neutron CT for concrete structure inspection with a pixel-type detector by applying linear scanning method</a>
<b>P2.5</b>	T. Kobayashi	Development of accelerator-driven neutron source RANS-II
<b>P2.6</b>	S. Sato	Research and Development of a High Counting Rate 3He Position Sensitive Detector System
<b>P2.7</b>	K. Tsuchida (Cancelled)	Compact neutron source for BNCT in Nagoya University

<b>P2.8</b>	Shakir Zeinalov	<a href="#">Thermal neutron intensity measurement with fission chamber in current pulsed and Campbell modes</a>
<b>P2.9</b>	P Konik	Comparison of the two possible geometries for the SANS instruments at the compact neutron source
<b>P2.10</b>	László Rosta	Moderator Testing Station at the Budapest Research Reactor
<b>P2.11</b>	Magan	<a href="#">Implementation of Supermirror physics with Deterministic transport in MCNP6</a>
<b>P2.12</b>	F. Sordo	ESS-Bilbao in kind contribution to ESS
<b>P2.13</b>	Xiaobo Li	Study of Neutron-generating Target for Transportable Accelerator-driven Neutron Source Using Low Energy Proton Beams
<b>P2.14</b>	Marc Zimmer	Laser based neutron sources
<b>P2.15</b>	Xuewu WANG	Commissioning of the 13-MeV proton and cold neutron beam at CPHS: status report on accelerator and neutron activities at Tsinghua University
<b>P2.16</b>	Evan Sengbusch	Commissioning of a High Yield Gas Target DT Neutron Generator for Driven Subcritical Assembly Medical Isotope Production
	Boris Khaykovich	<a href="#">Towards Axisymmetric and Focusing Neutron Analyzers to Enable Efficient Powder Neutron Diffractometers</a>