

31st International Seminar on Interaction of Neutrons with Nuclei: Fundamental Interactions & Neutrons, Nuclear Structure, Ultracold Neutrons, Related Topics (ISINN-31)

Thursday, 29 May 2025

Parallel Session 3: Neutron detection & Methodical aspects/Physics of ultracold neutrons: (1) - Room V6

(09:00 - 10:20)

-Conveners: Maxim Zakharov

time	[id] title	presenter
09:00	[130] Recent Progress of the Physical Design for the Ultra-Cold Neutron Source at CSNS	YI, Tiancheng
09:20	[113] Concept of the UCN Source at the WWR-K Reactor (A1SUN)	TURLYBEKULY, Kylyshbek
09:35	[95] Calculation for Improving the Efficiency of Ultracold Neutron Transport Using Monte Carlo Method	PHAM, Khac Tuyen
09:50	[118] Modeling and Optimization of Experimental Setup Geometry for Measuring Ultracold Neutron Loss Factors Using Gravitational Spectroscopy	KURMANALIYEV, Zhanibek
10:05	[734] Experimental Validation and Geant4 Simulation of Spatial Resolution in Fast Neutron Radiography at CSNS Back-n Facility	DUAN, Baojun

Parallel Session 3: Neutron detection & Methodical aspects/Physics of ultracold neutrons: (2) - Room V6

(10:50 - 13:05)

-Conveners: Tiancheng Yi

time	[id] title	presenter
10:50	[42] Neutron Dispersion Law for Matter Moving with Acceleration	ZAKHAROV, Maxim
11:10	[112] Optimisation of Bulk Density of Nanodispersed Medium to Maximise Its Reflectivity for Very Cold Neutrons	NEZVANOV, Alexander
11:30	[26] Universal Cryogenic Moderator for Research Neutron Sources of Any Power and Intensity	BULAVIN, Maksim
11:50	[67] VCN Test Facility as the Initial Phase of the UCN Facility Development	POPOV, Alexander
12:05	[80] Physical Design and Simulation of a Fission Spectrometer Based on the Velocity-Kinetic Energy Method	MA, Jun
12:20	[101] Parameters of Extracted Neutron Beams of the IREN Resonance Neutron Source at the FLNP, JINR	YERGASHOV, Almat
12:35	[129] Physical Design of PGAA and NDP for CSNS	WANG, Songlin
12:50	[65] Energy Distributions and Absolute Yields Measurements of the Long-Range Alpha Particles and the Tritons in Thermal Neutron-Induced Ternary Fission of ²³⁵ U Using a Twin-Gridded Ionization Chamber	WU, Zepeng

(14:00 - 15:35)

-Conveners: Changqing Feng

time	[id] title	presenter
14:00	[69] Energy-Sensitive Photon and Neutron Bimodal Imaging System: Design and Performance Validation	LAI, Yuxuan
14:20	[91] Multi-purpose Time Projection Chamber (MTPC) Signal Simulation Method and Experimental Verification	CHEN, Haizheng
14:35	[92] Research and Development of a Large-Size CsI(Tl) Detector for Neutron Capture γ -ray Measurement at the Back-n White Neutron Source of CSNS	LV, You
14:50	[96] Test of the Performance of an LGAD-Based Zero-Degree Detector on the CSNS Back-n Beamline	GUO, Yuhang
15:05	[115] Monitoring Neutron Spectrum of Reactor IBR2 Using New Direct Beam Detection System at Small Angle Neutron Scattering Spectrometer (YuMO)	ELMEKAWY , Ahmed
15:20	[122] Application of Micropattern Detectors from High-Energy Physics for Neutron Detection	ENIK, Temur

Parallel Session 3: Neutron detection & Methodical aspects/Physics of ultracold neutrons: (4) - Room V6

(16:05 - 18:10)

-Conveners: Alexander Nezvanov

time	[id] title	presenter
16:05	[140] Study of SEU Effects and Mitigation Measures for Kintex UltraScale FPGA using CSNS Neutron Beam Lines	FENG, Changqing
16:25	[729] A Neutron Detector Designed for ICF Diagnosis	SONG, Zhaohui
16:40	[19] Novel Neutron Detector Design for Accurate Measurement in Ultra-Iron Nucleosynthesis Study	CHEN, Jianqi
16:55	[20] Laser Plasma Accelerating Ultra-Short Ultra-Intense Electron Beam for Nuclear Applications	FENG, Jie
17:10	[35] Investigation of the Inverse Leidenfrost Effect in the Production of Moderating Material for Cold Neutron Sources	LITVAK, Ivan
17:25	[63] Installation of New Wide-Aperture Scintillation Detectors ASTRA-M and BSD on the IBR-2M Fourier-Diffractometers: First Results	PODLESNYY, Maxim
17:40	[82] Multi-Beam Accelerator-Driven Systems: A Safer and Scalable Approach to Nuclear Waste Transmutation	ZHU, Xiaochong