# Deutsche Neutronenstreutagung

## Dienstag, 17. September 2024

**Mounting Posters, Beer and light Dinner - Forum M (17:00 - 23:00)**

| [id] title | presenter | board |
|---|---|---|
| **[14] Magnetic microstructure of nanocrystalline Fe-Nb-B alloys as seen by small-angle neutron and X-ray scattering** | RAI, VENUS | |
| **[16] Combined X-ray and Neutron Powder Diffraction Study on B-Site Cation Ordering in Complex Perovskite La2(Al1/2MgTa1/2)O6** | | |
| **[108] Towards the Development of a Compact Very Cold Neutron Source for the Small-Angle Scattering Instrument for the High Brilliance Neutron Source** | | |
| **[41] Interdiffusion of polymer and water in waterborne polymer latex films** | SAHA, Debasish | |
| **[110] Mechanisms for Multiferroicity in Rare Earth Orthoferrites: An Overview** | FABRYKIEWICZ, Piotr | |
| **[128] Investigating the Influence of Cyclic Ageing on the Structure of NCM Cathodes and Graphite Anodes in 21700 Li Ion Batteries** | | |
| **[121] Advancing Spectroscopic Insights: Inelastic and Quasielastic Neutron Scattering for the Study of Hydrogen-Rich Materials** | | |
| **[83] Distribution of Cross-linkers in Microgels obtained by Contrast variation in Small Angle Neutron Scattering** | | |
| **[139] Exploring Spin Crossover Compounds for Barocaloric Application** | | |
| **[137] Neutron reflectometry with micro-second time resolution** | | |
| **[86] N-H⋯π Bonding in Benzene-Ammonia Solution** | | |
| **[116] Fe self-diffusion in Fe-Al-Si melts – A combined ab initio molecular dynamics and experimental study** | | |
| **[63] Neutron Scattering on Magnetic Multilayers Deposited onto highly ordered nanosphere arrays** | Dr. QDEMAT, Asmaa | |
| **[134] Neutron radiography investigations of the diffusion of liquid organic hydrogen carrier (LOHC) molecules in porous systems** | | |
| **[59] Microstructure and in-situ tensile behavior of CNTs reinforced Mg composites using neutron diffraction** | | |
| **[69] In situ simulation of a hydrogen storage material on the nanometer level driven by SANS measurements to explain the performance at engineering scale** | MAJUMDAR, Arnab | |
| **[117] Quasielastic neutron scattering to study the diffusion of water molecules on the surface of iron oxide nanoparticles at different relative humidities** | | |
| **[19] GEMS unique synchrotron & neutron dilatometer for in-situ scattering studies** | | |
| **[20] Application of Multidimensional Rietveld Refinement of Neutron Data** | | |
| **[51] Targeted residual stress in electrical steel – Towards novel electric drives** | NEUWIRTH, Tobias | |
| **[94] Origins of polysaccharide conformation and viscoelasticity in miscible heterogeneous solvent** | | |
| **[120] Conformation and Microscopic Dynamics of Ring Polymers** | | |

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| **[29] Signature of surface anisotropy in the spin-flip neutron scattering cross section of spherical nanoparticles: Atomistic simulations and analytical theory** | | |
| **[147] Invitation to the MLZ User Meeting** | LOMMATZSCH, Ina | |
| **[114] Timescales of Cell Membrane Fusion Mediated by SARS-CoV2 Spike Protein and influence of an antiviral drug candidate** | | |
| **[132] Understanding in vivo bilayer organization in photosynthetic algae with small angle neutron scattering** | | |
| **[48] Developments in the transfer program of neutron scattering instrumentation from BER II** | | |
| **[70] Dy incommensurate magnetic order in DyFeO3 single crystal** | | |
| **[43] Shielding performance of the prototype target station for the High Brilliance neutron Source (HBS) project** | | |
| **[143] Newly developed aerodynamic levitation device for neutron scattering experiments** | | |
| **[102] JULIC Neutron Platform, a testbed for HBS** | | |
| **[88] Applications and Perspectives of Hot Neutron Single Crystal Diffraction at HEIDI** | | |
| **[97] Elucidating the strong entanglement between spin and orbital degrees of freedom in CaCu$_3$Ti$_4$O$_{12}$ and its Influence on magnetism.** | | |
| **[46] Bayesian approach for fitting Molecular Dynamics simulations to neutron and X-ray diffraction and spectroscopy data simultaneously** | REICH, Veronika | |
| **[99] Non-trivial Spin Structures and Multiferroic Properties of the DMI-Compound $Ba_{2}CuGe_{2}O_{7}$** | WILD, Peter | |
| **[52] Foams in the view of SANS** | | |
| **[55] The influence of dipolar interactions on the critical dynamics in Ni investigated by high-resolution neutron spectroscopy** | Dr. BEDDRICH, Lukas | |
| **[106] Structural evolution of a model colloidal gel in a simple shear field** | GARVEY, Christopher | |
| **[91] Influence of SrIrO3/SrRuO3 Multilayer Interface on Magnetic Skyrmions Formation** | | |
| **[109] Impact of Coating Type on Structure and Magnetic Properties of Biocompatible Iron Oxide Nanoparticles: Insights into Cluster Organization and Oxidation Behaviour** | | |
| **[129] Diffusivity Investigation of Hydrogen Isotopes in Flexible MOFs by Quasi-Elastic Neutron Scattering** | PARK, Jitae | |
| **[96] Spin Correlations in Assemblies of Iron Oxide Nanoparticles** | | |
| **[141] SANS data reduction and analysys QtiSAS: current status** | | |
| **[111] KWS-1: Polarisation analysis on a high-flux SANS instrument** | | |
| **[78] Complexes of Oppositely Charged Microemulsions and Polyelectrolytes are Highly Dynamic** | | |
| **[28] Signature of magnetic skyrmions in the chiral function** | | |
| **[81] Transitions in Fe3O4/Nb:STO heterostructures investigated by Polarized Neutron Reflectometry** | | |
| **[131] Lattice dynamics of Pb(Mn1-xFex)BO4 (x = 0, 0.5 1.0) studied by inelastic neutron scattering** | | |

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| **[22] Deuteration Service for Users of the MLZ Neutron Scattering Instruments** | | |
| **[119] Using Light to see Scattered Neutrons: an efficient technology applied to neutron scattering** | | |
| **[80] Interface structure and dynamics of protein stabilized food emulsions** | | |
| **[101] A Colloidal Approach to the Microplastic Bane: Small Angle Neutron Scattering Studies on Model Microplastic Flocs** | JOSEPH BONIFACE, Brijitta | |
| **[118] High-efficiency diffractometer ERWIN** | HÖLZEL, Markus | |
| **[122] Polyelectrolytes: Interchain hydrodynamic interaction and internal friction** | BIEHL, Ralf | |
| **[135] In-situ small angle neutron scattering under thermal-mechanical coupled field loading** | | |
| **[95] Low-dimensional para-hydrogen moderators** | RUECKER, Ulrich | |
| **[104] The Concept of a Novel Para-Hydrogen Based Cold Neutron Source with Simultaneously Increased Flux and Brightness** | | |
| **[35] The cold neutron three-axis spectrometer IN12 at the ILL** | | |
| **[37] HYMN – A novel unified toolbox for in-situ magnetic hyperthermia experiments using neutron scattering** | | |
| **[136] New software for analysing neutron total scattering in 2-axis diffractometers** | | |
| **[40] The Macromolecular Neutron Single Crystal Diffractometer BIODIFF for Proteins at the Heinz Maier-Leibnitz Zentrum MLZ** | | |
| **[44] KOMPASS – the polarized cold neutron triple-axis spectrometer at the FRM II** | | |
| **[85] Recommendation system for small angle neutron scattering models based on machine learning from Monte Carlo virtual experiments** | | |
| **[21] Novel Application of Volume Detectors Improving Data Quality in Neutron Powder Diffraction** | | |
| **[79] Scientific applications with the high resolution neutron backscattering spectrometer SPHERES** | ZAMPONI, Michaela | |
| **[113] SKADI - Small-Angle Neutron Scattering @ ESS** | | |
| **[145] Relocation of the cold triple axis spectrometer FLEXX to MLZ, Munich: Larmor diffraction and inelastic scattering** | SKOULATOS, Markos | |
| **[146] Development of Modular Sample Environment for Simultaneous SANS and Spectroscopic Characterization of Non-Equilibrium Soft Matter** | DAS, Avik | |
| **[18] Sample environment for control of temperature and gas phase composition during the neutron spectroscopy of soft materials** | | |
| **[25] Innovative approach for sustainable and low-waste production of 99Mo for radiodiagnostics using an accelerator based neutron source** | | |
| **[27] Combination of Small Angle Neutron Scattering and Quantum Cascade Laser-based Infrared Spectrophotometer for the Investigation of Amyloid Formation** | SCHRADER, Tobias | |
| **[77] Printed Neutron Converter Foils** | | |
| **[144] Small-angle Neutron Scattering Instrument and Applications at China Spallation Neutron Source** | | |
| **[31] Validation of a Polyethylene Thermal Moderator for accelerator-driven neutron source** | | |

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| **[56] Draft recommendations on metadata capture and specifications** | | |
| **[17] Upgrade concept of the instrument TOFTOF** | WOLF, Marcell | |
| **[23] The Engineering Diffractometer BEER at ESS - Features and Status Update** | | |
| **[32] Surface Charged Polymeric Micelles - A Tunable Model System Studied by SANS** | STELLBRINK, Jörg | |
| **[126] Learning self-supervised representations of powder diffraction patterns** | DAS, Shubhayu | |
| **[84] Development of a GEM based neutron detector with VMM readout** | | |
| **[92] Design concept of a diffractometer for the HBS Science Demonstrator** | | |
| **[115] Polarized SANS and GISANS at the ESS** | | |
| **[87] Neutron sensitive Microchannel Plate with a Timepix3 readout** | GÜRBÜZ, Saime | |
| **[38] Focusing with a nested mirror optic on the thermal triple-axis spectrometer PUMA at MLZ** | WEBER, Frank | |
| **[124] OSCARS: Taking science research to the next level** | NENTWICH, Melanie | |
| **[123] Calibration of the neutron optical path of the engineering materials neutron diffractometer “EMD” at the China Spallation Neutron Source** | | |
| **[50] Investigation of proximity effects in a YBa2Cu3O7-x/SrRuO3 bilayer heterostructure by magnetotransport measurements and neutron scattering techniques** | | |
| **[58] Comparison of experimental and simulated neutron cold spectra for para- and ortho-hydrogen** | SCHMIDT, Norberto | |
| **[62] Magnetic hypertermia investigation of nanoparticles with SANS** | | |
| **[71] Machine learning based Optimization of Measurement Strategies for Small Angle Neutron Scattering** | | |
| **[75] Unconventional magnetic excitations and complementary neutron scattering sum rule on spin-1/2 triangular antiferromagnets** | | |
| **[64] Background from sample cryostat on three-axis spectrometer: can it be reduced?** | | |
| **[68] Influence of Synthesis Conditions on the Microgel Structure** | | |
| **[66] Deep Learning Approaches for Neutron Diffraction Crystalline Phase Identification** | | |
| **[82] New options on the polarized neutron single crystal diffractometer POLI at MLZ** | XU, Jianhui | |