

Session Program

17-19 Sept 2018



German Conference for Research with Synchrotron Radiation, Neutrons and Ion Beams at Large Facilities

Poster session 2

Fakultät für Maschinenwesen der Technischen Universität München
Boltzmannstraße 15 85748 Garching b. München

Tuesday 18 September

16:00

Poster session 2

Poster Session |

Location: Fakultät für Maschinenwesen der Technischen Universität München, Boltzmannstraße 15 85748 Garching b. München

Study of uranium in natural and synthetic carbonate apatites using radiochemical, synchrotron radiation and fission track techniques

Speaker

Dr Ioannis Tzifas

Instrumentations for in situ PXRD and XAS during the adsorption of gases and vapours at KMC-2 beamline of BESSY II synchrotron

Speaker

Volodymyr Bon

Structural and electronic correlation in hole-doped $\text{Pr}_{2-x}\text{Sr}_x\text{NiO}_{4+d}$

Speaker

Dr Avishek MAITY

Phase behavior and solution structure of new UCST- and LCST-type polymers

Speaker

Mr Arne Lerch

$6\text{Mg}(\text{NH}_2)/9\text{LiH}/\text{LiBH}_4$: Molecular Dynamics and Hydrogen Diffusion

Speaker

Mrs Neslihan Aslan

The structural, thermal and dynamic behavior of the thermoresponsive polymer poly(N-isopropylmethacrylamide)

Speaker

Ms Chia-Hsin Ko

In-situ GISAXS during sputter deposition of metal nanolayers on functional polymer thin films for lithium-ion batteries

Speaker

Simon Schaper

Ordering of Carbon Tetrachloride confined in slit geometry

Speaker

Milena Lippmann

On the electronic and geometric structure of a single atom Cu/UiO-66 CO oxidation catalyst during reaction - An operando XAFS study

Speaker

Dr Ali Abdel-Mageed

The Materials Science group at Heinz Maier-Leibnitz Zentrum (MLZ)

Speaker

Dr Ralph Gilles

Complementary neutron/synchrotron study of structure and magnetism of rare earth/transition metal multilayers

Speaker

Yury Khaydukov

The high resolution diffraction beamline P08

Speaker

Dr Florian Bertram

Multi-Modal, Multi-Dimensional, Correlative Imaging: News from the GINIX

Speaker

Markus Osterhoff

Exploration of dynamic fluid regimes during steady-state multiphase flow in a sandstone with using synchrotron imaging

Speaker

Ms YING GAO

Super-SIMS at HZDR - first steps

Speaker

Georg Rugel

Dynamics of proteins in aqueous solutions - recent advances using high-resolution neutron spectroscopy

Speaker

Mr Christian Beck

An insight into atmospheric degradation processes by mapping local nanoheterogeneities within hybrid polycrystalline perovskite films

Speaker

Shambhavi Pratap

Spin Hall Magnetoresistance in a Canted Ferrimagnetic Insulator

Speaker

Matthias Opel

In-situ neutron diffraction study on compressive behavior of solution heat-treated Mg-Ca alloys at room and elevated temperature

Speaker

Weimin Gan

In-situ light scattering at neutron beam lines - experiences made and challenges ahead

Speaker

Tobias Schrader

The role of entropy in organic-inorganic perovskites and related coordination networks

Speaker

Dr Gregor Kieslich

Microstructure and in-situ tensile behavior of CNTs reinforced Mg composites using neutron diffraction

Speaker

Dr Weimin Gan

Investigating ion pairing in a liquid by electron-electron coincidence spectroscopy

Speaker

Uwe Hergenbahn

AB-INITIO METHODS FOR MEMBRANE PROTEIN STRUCTURE RECOVERY FROM SMALL-ANGLE NEUTRON SCATTERING DATA

Speaker

Alexandros Koutsoumpas

Morphology of Amphiphilic Molecular Brushes in Dilute Aqueous Solutions

Speaker

Jia-Jhen Kang

High-pressure crystallographic studies in diamond anvil cells using neutrons at HEIDI

Speaker

Andrzej Grzechnik

Pseudo-Goldstone Magnons in the Frustrated $S=3/2$ Heisenberg Helimagnet ZnCr_2Se_4 with a Pyrochlore Magnetic Sublattice

Speaker

Yevhen Onykienko

Time-resolved Structural Analysis of Solvent Vapor Annealing Processes of the Photoactive Material DRCN5T:PC71BM Using GIWAXS

Speaker

Marvin Berlinghof

Morphology and crystallinity of $\text{Sr}_x\text{Co}_y\text{O}_z$ films at different growth conditions and stoichiometry

Speaker

Mr Patrick Schöffmann

Polymer membranes analyzed by Elastic Recoil Detection and Positron Annihilation Lifetime Spectroscopy

Speaker

Mrs Rhea Verbeke

Studying the dependency between ligand and Gold to improve nanoparticle growth

Speaker

Mr Tobias Zech

PIPE: The Photon-Ion-Endstation at PETRA III for Experimental Studies of XUV-Photoprocesses in Small Quantum Systems

Speaker

Stefan Schippers

The Structural and magnetic properties of ordered arrangements of magnetic nanoparticles

Speaker

Asmaa Qdemat

Initial investigations of hydrating cellulose thin films using GISANS

Speaker

Prof. Stephan V. Roth

Nuclear Inelastic Scattering and Density Functional Theory Studies of Spin Crossover Compound ligand [Fe(1,2,4-triazole)₂(1,2,4-triazolato)](BF₄)₂

Speaker

Dr Juliusz A. Wolny

Single and double layered square arrays of magnetic nanoparticles

Speaker

Mr Dominique Dresen

PtyNAMI: Ptychographic Nano-Analytical Microscope at PETRA III -How to achieve sample stability in the nanometer range

Speaker

Ralph Döhrmann

Impact of interfacial solvent restructuring onto catalytic behavior by PDF

Speaker

Mr Mirco Eckardt

Swift heavy ion research of condensed matter at extreme conditions

Speaker

Debora Faller

The anomalous breakdown of the Stokes-Einstein relation in Ge-Sb-Te and Ag-In-Sb-Te alloys and its connection to fast crystallization in the supercooled liquid

Speaker

Dr Shuai Wei

JCMS @ ILL: News and progress on IN12

Speaker

Dr Wolfgang Schmidt

Phase transformations during battery operation in vanadium phosphate cathode materials probed by operando synchrotron X-ray diffraction

Speaker

Daniel Sørensen

High-throughput X-ray microtomography for 3D digitization of insects

Speaker

Thomas van de Kamp

X-Ray Investigation of Structure and Kinetics of Photoswitchable Lipid Monolayers

Speaker

Mr Jonas Varias

The Engineering Diffractometer BEER at ESS: A Status Update

Speaker

Jochen Fenske

Printing technology for photovoltaic applications**Speaker**

Benjamin Predeschly

Aging studies and influence of anode in LiFePO₄-based cells with neutron diffraction**Speaker**

Neelima Paul

Instrumentation for compact High Brilliance Neutron Sources**Speaker**

Dr Ulrich Rücker

The high intensity reflectometer of the JCNS: MARIA**Speaker**

Alexandros Koutsioumpas

Dynamic response of high power target and beam dump materials to short pulse ion beam-induced pressure waves**Speaker**

Marilena Tomut

Proximity effects across oxide interfaces of superconductor-insulator-ferromagnet hybrid heterostructure**Speaker**

Amitesh Paul

Crystallographic screening of sp³-rich fragment library for Protein Kinase A**Speaker**

Dr Stefan Merkl

A compact and calibratable von Hamos X-Ray Spectrometer based on two full-cylinder HAPG mosaic crystals for high-resolution XES and RIXS**Speaker**

Mrs Ina Holfelder

Analysis of H₂O/D₂O interaction with PNIPAM microgel thin films during swelling and exchange kinetics**Speaker**

Tobias Widmann

Advanced gas atmosphere options at the BESSY II beamline KMC-2**Speaker**

Dr Daniel M. Többens

The Frag4Lead 3D Pharmacophore-Diverse Fragment Library and Following Up on Crystallographic Fragment Hits**Speaker**

Prof. Gerhard Klebe

T-REX, a bi-spectral chopper spectrometer for the ESS

Speaker

Dr Nicolò Violini

NANOSCALE CAVITATION STUDY IN A LAVAL NOZZLE BY SAXS**Speaker**

Dr Guenter Rinke

Diffraction Based Determination of Single Crystalline Elastic Constants on Polycrystalline Alloys**Speaker**

Alexander Heldmann

Pore-scale Imaging of Oil Flow Dynamics In a Mixed-wet Carbonate Reservoir Rock at Subsurface Conditions Using Synchrotron Fast Tomography**Speakers**

Mr Amer Alhammadi, Ms Ying Gao

Self-Assembly in ultrahigh molecular weight diblock copolymer thin films**Speaker**

Mr Wei Cao

Hard X-ray spectroscopy of magnetic thin films for spintronic devices**Speaker**

Mr Andrei Gloskovskii

Strain Induced Martensitic Transformation in Austempered Ductile Iron (ADI)**Speaker**

Michael Hofmann

Measurement of the Vacancy Formation Enthalpy of Lanthan at the CDB Spectrometer at NEPOMUC**Speaker**

Lucian Mathes

Development of picosecond time-resolved nuclear resonance scattering and a novel synchrotron Mössbauer source at PETRA III**Speaker**

Sakshath Sadashivaiah

Ultrafast Demagnetization by Extreme Ultraviolet Light**Speaker**

A. Philippi-Kobs

Histidine protonation and its influence on the electronic and vibrational properties of a "Rieske-like" iron-sulfur protein**Speaker**

Hendrik Auerbach

Spin Structure in Magnetic Nanospheres**Speaker**

Mrs Dominika Zákutná

Practical Aspects of Crystallographic Fragment Screening

Speaker

Jan Wollenhaupt

Implementation of the Cryo-EXAFS environment at the XANES end station of the KMC-2 beamline**Speaker**

Götz Schuck

Professionalizing scientific software development**Speaker**

Joachim Wuttke

Ultrafast neutralization dynamics of highly charged ions upon impact on 2D materials**Speaker**

Dr Richard Wilhelm

The New Small-Angle Neutron Scattering Instrument SANS-1 at MLZ - Features and First Results**Speaker**

Sebastian Muehlbauer

Molecular properties and growth conditions associated with PSS diffusion during annealing in polyelectrolyte multilayers**Speaker**

Mrs Annekatrin Sill

Preparation and characterization of spin crossover thin solid films**Speaker**

Mr T. Hochdörffer

Conformational dynamics of proteins studied by time resolved small angle X-ray scattering combined with THz irradiation**Speakers**

Siawosch Schewa, Till Zickmantel

The new end-station PEAXIS for RIXS and XPS measurements at the BESSY II synchrotron**Speaker**

Dr Klaus Habicht

NICOS - an instrument control framework**Speaker**

Jens Krueger

Magnetic properties and lattice dynamics of $\text{Mn}_3\text{Fe}_2\text{Si}_3$ single crystal**Speaker**

MOHAMMED AIT HADDOUCH

In situ investigation of electrodeposition at liquid-mercury interfaces by X-ray reflectivity**Speaker**

Mr Andrea Sartori

Novel Reflection High-Energy Positron Diffractometer at NEPOMUC**Speaker**

Mr Matthias Dodenhöft

Frustration in Sm-based pyrochlores**Speaker**

Viviane Peçanha Antonio

New insights on the identification of iron structures in Fe-N-C catalysts by NIS and Mössbauer spectroscopy**Speaker**

Stephan Wagner

The new Quenching & Deformation Dilatometer for Materials Science with Neutron Scattering at MLZ**Speaker**

Dr Xiaohu Li

Sub-micrometer angle-, spin-, and polarization-dependent photoelectron spectroscopy in the tender X-ray regime**Speaker**

Dr Matthias Kallaene

Structure and Dynamics Polyelectrolyte/Microemulsion Complexes (PEMECs) Studied by Neutron Scattering**Speaker**

Prof. Michael Gradzielski

Two for the price of one (proposal): MBE sample growth and polarised neutron reflectometry at MLZ**Speaker**

Sabine Pütter

Surface Modes in Phospholipid Membranes**Speaker**

Sebastian Jaksch

Combination of kinetic and structural studies of catalysts at the CAT-ACT X-ray spectroscopy beamline at KIT**Speaker**

Dr Anna Zimina

Rationally improving Pt-ceria based exhaust gas catalysts by time and space resolved operando QEXAFS**Speaker**

Florian Maurer

In situ high energy X-ray diffraction during transient liquid phase bonding of a γ -TiAl alloy**Speaker**

Katja Hauschildt

The Sample Environment Communication Protocol (SECoP)

Speaker

Dr Klaus Kiefer

Directional, hierarchical films via spray coating**Speaker**

Julian Heger

peakR: An Open-Source Nonlinear Curve Fitting Package**Speaker**

Mr Ramon Quitales

Heavy ion-induced gas desorption in accelerators**Speaker**

Markus Bender

Structure investigation of the new VDM Ni-based superalloy 780 Premium**Speaker**

Cecilia Solis

Swift heavy ion-irradiated calcite (CaCO₃) analyzed by UV-C Laser excited Fluorescence-Spectrometry**Speaker**

Prof. Ulrich A. Glasmacher

Upgrades of the neutron scattering instruments at MLZ for soft matter research**Speaker**

Henrich Frielinghaus

Gold Cluster Growth on Polymer Thin Films during Sputter Deposition**Speaker**

Matthias Schwartzkopf

KWS-1 SANS instrument with polarization analysis**Speaker**

Artem Feoktystov

“Structure research” activities at MLZ**Speaker**

Anatoliy Senyshyn

Crystal structures and phase transitions of inorganic-organic hybrid layered materials (C₆H₅CH₂CH₂NH₃)₂MCl₄ (M = Cu²⁺ and Mn²⁺)**Speaker**

Dr In-Hwan Oh

Magnetic skyrmions study in Fe(0.34nm)/Gd(0.45nm, 0.50nm, 0.55nm)]×80 multilayers**Speaker**

Ms Zahra Inanloo Maranloo

Interface effects in superconductor-ferromagnet heterostructures**Speaker**

Ms Annika Stellhorn

Voltage control of magnetism in oxide heterostructures: Neutron & X-ray and electron microscopy investigation**Speaker**

Ms Tanvi Bhatnagar

Neutron optics for neutron beta decay studies with Proton Electron Radiation Channel (PERC)**Speaker**

Mr Alexander Hollering

Uncover processes at the interface with neutrons**Speaker**

Dr Henrich Frielinghaus

On the origin of Au charging during green methanol synthesis on Au/ZnO An in situ / operando spectroscopy study**Speakers**

Ali Abdel-Mageed, Dr Alexander Klyushin, Prof. R.J. Behm

MLZ Science Group "Quantum Phenomena"**Speaker**

Dr Yixi Su

Element-specific atomic-scale structure and anion positions of Cu₂(Zn,Fe)SnS₄ kesterite-stannite alloys**Speaker**

Claudia S. Schnohr

Macromolecular Neutron Diffraction at the FRM II Neutron Source**Speaker**

Andreas Ostermann

Influence of shear forces on the structure and flow behaviour of casein micelles**Speaker**

Mr Sahel Khanna

In-situ investigation of the sputter deposition of metal contacts on polymer thin films**Speaker**

Franziska Löhner

Morphologies and Solvent Distribution During Solvent Vapor Annealing of Block Copolymer Thin Films: In situ, Real-time GISAXS Investigations**Speaker**

Christine Papadakis

Structural properties and room temperature ferromagnetism in nanocrystalline HfO₂**Speaker**

Mr Sandeep Kumar

New Opportunities for Time-Resolved Photoelectron Spectroscopy at the European XFEL

Speaker

Sebastian Thiess

Nuclear resonance scattering and Mössbauer studies of a trinuclear iron ferrocene complex**Speaker**

Andreas Omlor

Time-resolved X-ray diagnostics of pulsed laser ablation in liquids (PLAL))**Speaker**

Dr Anton Plech

An XUV and soft X-ray split-and-delay unit for FLASH II**Speaker**

Sebastian Roling

Grating-based phase-contrast microtomography at PETRA III**Speaker**

Felix Beckmann

Investigating interfaces and spinterfaces of organic radicals by X-ray based spectroscopies**Speaker**

Mr Tobias Junghöfer

Oxygen Vacancies in High-Tc Superconductor Studied with a Scanning Positron Beam**Speaker**

Christoph Hugenschmidt

Morphology phase diagram of printed titania films derived from block copolymer template assisted a sol-gel technique**Speaker**

Ms Nian Li

Larmor diffraction -status and new concepts**Speaker**

Thomas Keller

Pharmaceutical Nanoparticles - Study by Neutrons, Photons and DLS**Speaker**

Thomas Nawroth

Self-organization of shape anisotropic nanoparticles at the liquid-air interface**Speaker**

Ms Flore Mees

Neutrons as tool for Residual Stress characterization from the surface to the bulk - RS state improvement of a 316L ITER welded plate by machining**Speakers**

Dr Joana Rebelo-Kornmeier, Dr Michael Hofmann

Nanostructured Mixed-Dimensional Lead Bromide Perovskite Films with Preferential Crystal Orientation Investigated with Advanced Scattering Techniques

Speaker

Rui Wang

How does strain influence the performance in polycrystalline solar cells at the nanoscale?

Speaker

M. E. Stuckelberger

NEW DEVELOPMENTS ON THE SANS INSTRUMENT D11 AT THE ILL

Speaker

Ralf SCHWEINS

Development of a cylindrical MiniMuPAD

Speakers

Henrik Gabold, Ran Tang

The footprint from distinctly rough gratings in the scattering pattern

Speaker

Ms Analía Fernández Herrero

Ion-induced surface patterning and its application in nanofabrication via templated growth

Speaker

Dr Denise Erb

Grain boundary self-diffusion in $\text{Fe}_{56}/\text{Fe}_{57}$ multilayers by in situ neutron reflectometry

Speaker

Dr Szilárd Sajti

Topologically stable helices in exchange-coupled rare-earth/rare-earth multilayer with superspin-glass-like ordering

Speaker

Jingfan Ye

^3He polarization for JCNS instrumentation

Speaker

Earl Babcock

Fine-tuning protein phase transitions: a TR-USAXS and VSANS study

Speaker

Ms Olga Matsarskaia

The production and moderation of neutrons for a High Brilliance Neutron Source

Speaker

Dr Paul Zakalek

A Structural Investigation of Transition Metal Antimonates

Speaker

Sneh Patel

Emergence of cooperativity in the coverage-dependent spin transition of an Fe(II) complex on a graphite surface

Speaker

Prof. Wolfgang Kuch

Structural Characterization of Organic Nanoparticles Prepared by Antisolvent Precipitation

Speaker

Isabel Schuldes

Modern diffraction methods for the investigation of thermo-mechanical processes

Speaker

Klaus-Dieter Liss

Application of X-Ray Fluorescence Holography on the Superconductor Parent β -FeTe

Speaker

Mr Benedict Paulus

In-situ neutron diffraction and multi-scale modeling of mechanical behavior of the CNT/Al composite

Speaker

Dr X.X. Zhang

Continuous transition from antiferro- to ferromagnetic state via moment canting in $\text{Ni}_{2-x}\text{Co}_x\text{MnAl}$

Speaker

Michael Leitner

Influence of Microstructure on Symmetry Determination of Piezoceramics

Speaker

Dr Manuel Hinterstein

Potential of in situ triaxial stress experiments using neutron time-of-flight diffraction on porous rocks for reducing the risk of subsidence and induced seismicity through gas production

Speaker

Dr Birgit I.R. Müller

High Resolution Neutron Detection using Gridpix chips

Speaker

Markus Köhli

In situ GISAXS Investigations of pH and Temperature Responsive Block Copolymer Thin Films during Swelling in Water Vapor

Speaker

Florian Jung

Interlayer correlations in 1:1 ferecrystals

Speaker

Maria Hentschel

Neutron activation analysis (NAA) reveals “fingerprint” of materials: From microchips to meteorites

Speaker
Xiaosong Li

The New DynaMax endstation at the FemtoSpex Slicing facility for ultrafast dynamics

Speaker
Dr Nele Thielemann-Kühn

Cellulose-based conducting nanocomposite films via spray deposition with in situ GISAXS

Speaker
Volker Körstgens

Lattice Dynamics of Epitaxial Strain-Free Interfaces

Speaker
J. Kalt

Structural and magnetic properties of cobalt iron disulfide nanocrystals

Speaker
Dr Neelima Paul

High energy synchrotron radiation for the development of tungsten fibre-reinforced tungsten composites

Speaker
Mr Johann Riesch

Multiscale X-Ray Analysis of Biological Cells and Tissues by Scanning Diffraction and Coherent Imaging

Speaker
Mr Jan-David Nicolas

Surface induced order in ionic liquids

Speaker
Markus Mezger

17:30