

**Session Program**

**Oct 29 - 30, 2019**

**PSI Condensed Matter Retreat 2019 @ FHNW  
Brugg**

***Poster session***

FHNW Brugg

## Tue, October 29

2:00 PM

### Poster session: even #'s

Session | Location: FHNW Brugg

2:00 – 2:30 PM

#### Evidence of large polarons in photoemission band mapping of the perovskite semiconductor CsPbBr<sub>3</sub>

**Speaker**

Nicola Colonna

2:00 – 2:30 PM

#### Thin Film Deposition With The Sputtering Lab @ LIN

**Speaker**

Christine Klauser

2:00 – 2:30 PM

#### Disentangling charge and spin excitations in RIXS spectra and their evolution in the phase diagram of Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+x</sub> superconducting cuprate

**Speaker**

Wenliang Zhang

2:00 – 2:30 PM

#### Operando observation of structural relaxation in ferroelectric GeTe(111)

**Speaker**

Matthias Kurt Muntwiler

2:00 – 2:30 PM

#### CO<sub>2</sub> alcoholysis to organic carbonates over Zr-based catalysts: an in situ ATR-IR study

**Speaker**

Matteo Signorile

2:00 – 2:30 PM

#### Bragg coherent diffractive imaging of one-dimensional topological strings in multiferroic barium hexaferrite nanocrystals

**Speaker**

Dmitry Karpov

2:00 – 2:30 PM

#### Spin uctuation induced Weyl semimetal state in the paramagnetic phase of EuCd<sub>2</sub>As<sub>2</sub>

**Speaker**

Dr J.-Z. Ma

2:00 – 2:30 PM

#### Switching a cryo-memory cell in less than half a picosecond

**Speaker**

Dr Jan Ravnik

2:00 – 2:30 PM

#### Probing solid-liquid interfaces with tender X-rays

**Speaker**

Zbynek Novotny

2:30 - 3:00 PM

**Dzyaloshinskii-Moriya Interaction in Nanocrystalline Vitroperm****Speaker**

Yifan Quan

2:30 - 3:00 PM

**Determination of Molybdenum Species Evolution during Non-Oxidative Dehydroaromatization of Methane and its Implications for Catalytic Performance****Speaker**

Miren Agote Aran

2:30 - 3:00 PM

**Neutron-based research on additive manufactured materials at the Paul Scherrer Institute****Speakers**

Efthymios Polatidis, Dr Jan Capek, Manuel Morgano, Pavel Trtik, Markus Strobl

2:30 - 3:00 PM

**Analysis of Silicon Carbide ultra-thin (<2um) x-ray sensors for synchrotrons beam position monitors applications****Speakers**

Dr Maria del Mar Carulla, Dr Massimo Camarda

2:30 - 3:00 PM

**Observing dynamics in photoexcited states of photocatalysis/photoelectrodes studied by transient XAS in XFELs****Speaker**

Yohei Uemura

2:30 - 3:00 PM

**GdFeCo nanoparticles for all-optical magnetization switching****Speaker**

Dr Sergii Parchenko

2:30 - 3:00 PM

**Single spin-polarised Fermi surface in SrTiO<sub>3</sub> films****Speaker**

Eduardo Bonini Guedes

2:30 - 3:00 PM

**Stroboscopic neutron diffraction applied to fast time-resolved operando studies on Li-ion battery****Speaker**

Dr Denis Sheptyakov

2:30 - 3:00 PM

**Momentum Signatures of Site Percolation in disordered 2D Ferromagnets in low and high defect density regimes****Speaker**

Zhi Jian Daniel Tay

3:00 - 3:30 PM

**Operando high energy XRD of Cu/La<sub>0.5</sub>Sr<sub>0.5</sub>CoO<sub>3</sub> TWC under oscillating feed**

**Speaker**

Ivo Alxneit

3:00 - 3:30 PM

**High-resolution neutron imaging of hydrogen concentrations in nuclear fuel claddings****Speaker**

Dr Pavel Trtik

3:00 - 3:30 PM

**Ultrafast dynamics of structural and orbital order in TiSe<sub>2</sub>****Speaker**

Max Burian

3:00 - 3:30 PM

**Revisiting the magnetic structure of R<sub>1/3</sub>Sr<sub>2/3</sub>FeO<sub>3</sub> (R = La, Pr, Nd) by neutron powder and single crystal diffraction combined with spherical polarimetry****Speaker**

Dr Ekaterina Pomjakushina

3:00 - 3:30 PM

**Addressing Electronic and Spin Transitions of Switchable Molecules in the Monolayer Range****Speaker**

Dr Niéli Daffé

3:00 - 3:30 PM

**Topochemical synthesis of the 2M-WS<sub>2</sub>****Speaker**

Dr Dariusz Jakub Gawryluk

3:00 - 3:30 PM

**Time-of-arrival detection for time-resolved STXM imaging****Speaker**

Dr Simone Finizio

3:00 - 3:30 PM

**Spin reorientation in ferromagnetic type-II Weyl Fe<sub>3</sub>Sn<sub>2</sub>.****Speaker**

Neeraj Kumar

3:00 - 3:30 PM

**Influence of Selective Laser Melting strategies and post treatment on the residual stresses and microstructure of Alloy 718****Speaker**

Dr Jan Capek

3:30 PM

5:30 PM

**Poster session: odd #'s**

Session | Location: FHNW Brugg

5:30 - 6:20 PM

**Quantum interference between multi-triplon continua and bound states in quasi-one-dimensional cuprate Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub>****Speaker**

Mr Yi Tseng

5:30 – 6:20 PM

**Synthesis of Al-Sc, Al-Zr, and Al-Sc-Zr alloys via SLM from elemental powder blends****Speaker**

Ms Jennifer Glerum

5:30 – 6:20 PM

**Probing the magnetic state of Ni in NdNiO<sub>3</sub>/La<sub>0.7</sub> Sr<sub>0.3</sub>MnO<sub>3</sub> bilayer****Speaker**

Anna Zakharova

5:30 – 6:20 PM

**Emerging molecular magnetic materials****Speaker**

Jan Gui-Hyon Dreiser

5:30 – 6:20 PM

**Time-resolved X-ray tomography of multiphase systems****Speaker**

Vladimir Novak

5:30 – 6:20 PM

**Structural phases of elemental Gallium: universal relations in conventional superconductors****Speaker**

Dr Rustem Khasanov

5:30 – 6:20 PM

**The sound of the Q-phase in CeCoIn<sub>5</sub> - an ultrasound investigation****Speaker**

D. T. Maimone

5:30 – 6:20 PM

**Investigation of metal-insulator transition in Slater insulator, NaOsO<sub>3</sub> using static and time-resolved resonant x-ray diffraction****Speaker**

Namrata Gurung

5:30 – 6:20 PM

**Towards the understanding of the dynamics and the Raman effect of strained germanium lasing****Speaker**

Mr Francesco Taro Armand Pilon

6:20 – 7:10 PM

**Ultrafast dynamics of antiferromagnetic fluctuations in the spin-chain CuGeO<sub>3</sub>****Speaker**

Dr Eugenio Paris

6:20 – 7:10 PM

**In situ mechanochemistry of hybrid materials****Speaker**

Manuel Wilke

6:20 – 7:10 PM

**Synchrotron studies for optimization of Selective Laser Melting manufacturing of alumina parts**

**Speaker**

Malgorzata Grazyna Makowska

6:20 - 7:10 PM

**Stability of the Q -phase of CeCoIn5 in the presents of localized magnetic impurities****Speaker**

Junying Shen

6:20 - 7:10 PM

**Thermoelectric transport properties in magnetically ordered materials****Speaker**

Dr Hans Grimmer

6:20 - 7:10 PM

**Multiscale Materials Modelling****Speaker**

Monica Kosa

6:20 - 7:10 PM

**Finite-element mesh generation and simulation of magnetization dynamics in a three-dimensional artificial spin structure****Speaker**

Dr Sebastian Gliga

6:20 - 7:10 PM

 **$\delta$ -doped silicon devices for quantum electronics and optics****Speaker**

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6:20 - 7:10 PM

**Floating zone growth and characterization of topological materials****Speaker**

Pascal Puphal

7:10 - 8:00 PM

**Spontaneous reduction of polydispersity and self-healing colloidal crystals****Speaker**

Urs Gasser

7:10 - 8:00 PM

**Enhanced transformation-induced-plasticity in austenitic steel produced by selective laser melting****Speaker**

Efthymios Polatidis

7:10 - 8:00 PM

**Disordered skyrmion phase stabilized by magnetic frustration in a chiral magnet Co7Zn7Mn6****Speaker**

Jonathan White

7:10 - 8:00 PM

**Magnetic and lattice dynamics in CsNiCrF6****Speaker**

Mr Amirreza Hemmatzade

7:10 - 8:00 PM

**Dynamics of model systems with correlated disorder****Speaker**

Karim Essafi

7:10 - 8:00 PM

**Nodeless superconductivity and effect of hydrostatic pressure in the charge density wave superconductor SrPt<sub>2</sub>As<sub>2</sub>****Speaker**

Dr Ritu Gupta

7:10 - 8:00 PM

**Multiple Coulomb Phase in the Fluoride Pyrochlore CsNiCrF<sub>6</sub>****Speaker**

Dr Tom Fennell

7:10 - 8:00 PM

**Pd nanoparticles solid-liquid interface study during liquid phase selective hydrogenation by combined XAS and ATR-IR****Speaker**

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7:10 - 8:00 PM

**Triangular lattice antiferromagnet FeGa<sub>2</sub>S<sub>4</sub>****Speaker**

Oksana Zaharko

8:00 PM