

## **Session Program**

**Oct 20 - 22, 2025**



# **5th Science Workshop of the Program MML**

## **Parallel: Materials (RT2)**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal  
Englerstraße 11, 76131 Karlsruhe

## Tue, October 21

11:00 AM

### **Parallel: Materials (RT2)**

**Session |****Location:** Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

11:00 - 11:15

#### **Dynamic control of X-ray core-exciton resonances by Coulomb screening in photoexcited semiconductors**

**Speaker**

Thomas Rossi

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

11:15 - 11:30

#### **Orbital-overlap-driven hybridization in 3d-transition metal perovskite oxides LaMO<sub>3</sub> (M = Ti-Ni) and La<sub>2</sub>CuO<sub>4</sub>**

**Speaker**

Katarzyna Siewierska

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

11:30 - 11:45

#### **X-ray spectroscopy of UO<sub>2</sub> and the QUASY project**

**Speaker**

Mary Blankenship

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

11:45 - 12:00

#### **Pulsed Laser Deposition of multiferroic structures**

**Speakers**

Berkin Nergis, Sondes Bauer

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

12:00 - 12:15

#### **NN - DESY 1**

**Speaker**

Lydia Bachmann

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

12:15 - 12:30

#### **NN - DESY 2**

**Speaker**

Thomas Keller

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

12:30 - 13:30

#### **Lunch Break**

13:30 - 13:45

**Multilength scale investigation of the Perovskite-Bownmillerite topotactic phase transition in LaSrMnO<sub>3</sub> thin films****Speaker**

Chenyang Yin

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

13:45 - 14:00

**QENS Study of the Interface Dynamics of Wet Iron Oxide Nanoparticles****Speaker**

Matei Pascariu

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

14:00 - 14:15

**Microstructure mapping with a white synchrotron radiation beam****Speaker**

Guilherme Abreu Faria

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

14:15 - 14:30

**Swift heavy ion irradiation effects on tailored nanostructures****Speaker**

Ina Schubert

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

14:30 - 14:45

**High-field superconductivity in UTe<sub>2</sub>****Speaker**

Toni Helm

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

14:45 - 15:00

**A high-performance all-silicon photodetector enabling telecom-wavelength detection at room temperature****Speaker**

Yonder Berencen

**Location**

Karlsruhe Institute of Technology, Johann-Gottfried-Tulla-Hörsaal, Englerstraße 11, 76131 Karlsruhe

3:00 PM