

MLZ User Meeting 2022



Thursday 8 December 2022 - Friday 9 December 2022

Marriott

Scientific Programme

Material Science

The session of the Materials Science Group will cover a wide range of topics including alloy development, batteries, fuel cells, hydrogen storage, cultural heritage, and engineering. All contributions from fundamental research in materials science up to industry related applications are welcome!

Soft Matter

The Soft Matter Group focuses on "Structure and Dynamics from Small Molecules to Polymers". This includes ionic liquids, complex fluids, proteins, micelles and polymeric systems to name important representatives. We embrace industrial applications and basic research equally, such as food science and glass forming systems.

Quantum Phenomena

The session of the Quantum Phenomena group will include topics like (nano)magnetism, high temperature superconductivity, quantum magnetism, novel quantum phenomena, correlated electrons and unconventional superconductivity.

Structure Research

Focus of the MLZ Science Group "Structure Research" is on structural studies of a manifold of crystalline materials for the variety of applications, e.g. materials for energy transformation and storage, magnetic and superconducting systems, macromolecular/biological compounds and/or mineral framework structures. The instruments in our group utilize diffraction techniques to analyse details of structural and magnetic long-range order, phase transformations, systematics of mean square displacements, local disorder, details of microstructure, mixed compositions as well as incommensurate or twinned/domain structures of various kinds. Besides the structure research, the Group is deeply involved in the continuous development of diffraction-based methods, instrumentation and data evaluation techniques.

Neutron Methods

Nuclear, Particle and Astrophysics

Positrons

The session "Physics with Positrons" comprises all aspects of positron beam experiments ranging from fundamental research with leptons to solid state and surface physics. Planned projects and developments of the instrumentation at NEPOMUC will be discussed.

Plenary

This track is dedicated to the invited plenary talks on Friday.