

Physikalisches Kolloquium

JProf. Dr. Luana Caron

Universität Bielefeld

Antrittsvorlesung: Magnetic energy materials

Magnetic materials can be used for far more than simple magnets. By exploring the coupling between magnetic and structural lattices applications such as sensors, actuators and even refrigerators and nanoparticles for medical use may be realized. My research focuses in understanding how the coupling between different degrees of freedom gives rise to physical phenomena which are useful for applications. In this presentation I will talk about my previous work on transition metal based materials where several different types of magneto-elastic phase transitions give rise to large entropy changes which can be used for magnetocaloric refrigeration applications. Finally I will give an outlook of what I intend to do in the future, both as a continuation of my current research as well as new topics I would like to explore.

Montag, 08.10.2018, 16:15 Uhr

Ort: Hörsaal 6