

*Im Rahmen des Seminars*

# Recent Progress in Applied Physics

## LVA Nr. 374.008

*spricht*

**Mr MSc Josef Resl**

Center for Surface and Nanoanalytic ZONA, Johannes Kepler University Linz

*über*

# Optically Switchable Crystalline - Amorphous Phase Change Materials

Abstract:

This talk presents a comprehensive study of laser-induced phase transformations in Sb<sub>2</sub>S<sub>3</sub> thin films, combining fast numerical simulations with imaging ellipsometry and Raman spectroscopy. We developed an efficient simulation framework incorporating electromagnetic and thermal effects, which revealed the crucial role of saturable absorption in the amorphization process.