UNIVERSITÄT LEIPZIG

Physics Colloquium

Tuesday, January 30, 2024 at 16:30

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New Physics in Driven Quantum Materials

I will discuss how coherent electromagnetic radiation at Tera-Hertz and mid-infrared frequencies can be used to drive complex solids. Collective excitations are driven nonlinearly, leading to coupling amongst otherwise virtually non-interacting normal modes of the material. Driving gives rise to non-thermal states with unconventional properties, and sometimes with emergent order. Interesting examples involve the nonlinear control of the crystal lattice, used to induce magnetic order, ferroelectricity and non-equilibrium superconductivity at high temperatures.

Venue: Universität Leipzig, Faculty of Physics and Earth Sciences

04103 Leipzig, Linnéstraße 5, **Room: small lecture hall**

Everyone is welcome to a reception with coffee, drinks and cookies in the Aula following the talk.

For an up-to-date semester program, sign-up for the physics colloquium mailing list, and subscription to the digital calendars in CalDAV format, head to the colloquiums web page www.physgeo.uni-leipzig.de/events.