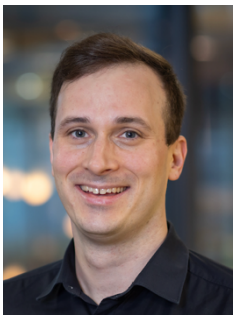
TECHNISCHE UNIVERSITÄT DRESDEN

Faculty of Physics

PHYSICS COLLOQUIUM

and GET-TOGETHER

Speaker: **Prof. Dominik Maximilian Juraschek**
Eindhoven University of Technology



Topic: **Chiral phononics: Controlling materials with a twist**

Time and place: Tuesday, July 15, 2025, **2:50 pm** – hybrid event
The colloquium will be held in REC/C213.
Online participation possible:
Zoom-Meeting: Meeting-ID: 631 3817 8900 / passcode: PC-SoSe25
https://tu-dresden.zoom-x.de/j/63138178900?pwd=TlmGawPz1dtDA6VzO2N1XdqqI7bE6b.1

Host: Prof. Sebastian Maehrlein

Abstract: Angular momentum of lattice vibrations is emerging as a fundamental quantity of interest that can be used to engineer functional properties of materials. In this talk, I provide an overview of current developments in the field and present recent predictions of novel physical phenomena arising from ultrafast chiral phonon excitation. I will further address the role of phonon chirality beyond angular momentum, showing that achiral crystals can be made chiral on demand.

Bio: BSc/MSc in Physics at University of Augsburg / PhD in Materials Science at ETH Zurich / Postdoc in Applied Physics at Harvard University / Assistant Professor (tenure-track) at Tel Aviv University / Assistant Professor (tenured) at Eindhoven University of Technology.

Get-Together:

The colloquium will be followed directly by a Get-Together with Prof. Dominik Maximilian Juraschek in REC/B101 (around 4:00 p.m.). All students and staff are invited to talk to the speaker and discuss perspectives on the academic career, work-life balance and the professional life as a scientist.