

# Seminar über die Physik der kondensierten Materie (SFB/TRR173 Spin+X und SFB/TR288 Kolloquium, TopDyn-Seminar)

Feb. 1, 2024 at 2 p.m.  
01 122 Newton-Raum

Huaiyang YUAN  
TU Delft and Zhejiang University

## **Boosting surface plasmon excitation by surface magnons**

There is a rising interest in integrating magnetic systems with known quantum platforms for multi-functional quantum information processing. The coupling among magnons, photons, phonons, and qubits has already been proposed and demonstrated in the experiments. In this talk, I will introduce our recent results on the interplay of magnons and surface plasmons in two-dimensional systems. Our findings may open a novel route to integrate plasmonic and spintronic devices and bridge the fields of low-dimensional physics, plasmonics, and spintronics.

Contact:

Univ.-Prof. Dr. Jure Demsar  
Univ.-Prof. Dr. Hans-Joachim Elmers  
Univ.-Prof. Dr. Mathias Kläui  
Univ.-Prof. Dr. Thomas Palberg