

PhD and Postdoctoral positions

Research group of Dr. Anna Galler,

Institute of Theoretical and Computational Physics, TU Graz

Electron dynamics and correlation in 2D quantum materials

We are a young and growing research group at TU Graz and are inviting applications for a **fully funded PhD position** and a **fully funded postdoctoral position** within our new **FWF ASTRA project**.

Our research combines state-of-the-art electronic structure and many-body methods to investigate the magnetic, electronic, and optical properties of 2D quantum materials, such as transition-metal dichalcogenides. These materials host a rich variety of quantum phases ranging from magnetism, charge order, superconductivity to quantum spin liquids, and offer exciting opportunities for future electronics and sensors. We are particularly interested in understanding and controlling these phases using ultrafast laser pulses.

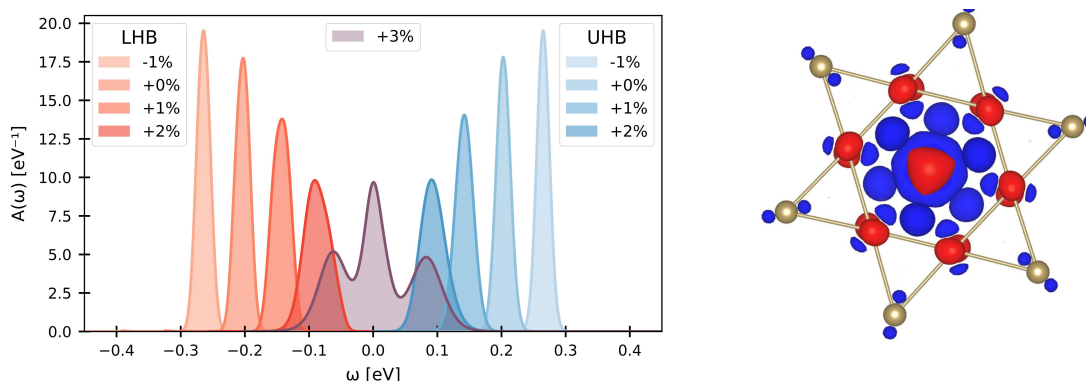


Figure: Tuneable electronic spectral function (left) of the Ta- d_{22} orbital (right) in monolayer 1T-TaS₂. [N. Notter, M. Aichhorn, A. Galler, Nano Letters 26 (15) 4973-4978, 2026]

PhD position

Requirements: Master's degree in Physics with outstanding academic performance, very good knowledge of solid-state physics and quantum mechanics, programming experience, intrinsic motivation, excellent English skills

Employment: 3-year position (75%) according to Austrian universities collective agreement

Application documents: motivation letter, CV, transcript of records, contact details of two referees

Postdoc position

Requirements: PhD in theoretical/computational condensed matter physics, experience with many-body methods (e.g. DMFT), excellent programming skills, excellent English skills, ability to work independently and collaboratively

Employment: 2-year position (100%) according to Austrian universities collective agreement

Application documents: motivation letter, CV, publication list, contact details of two referees

Preferred starting date: September/October 2026

Application: Please send your application documents to Dr. Anna Galler, anna.galler@tugraz.at

We are committed to fostering an inclusive and diverse research environment, and particularly encourage applications from underrepresented groups in physics.