

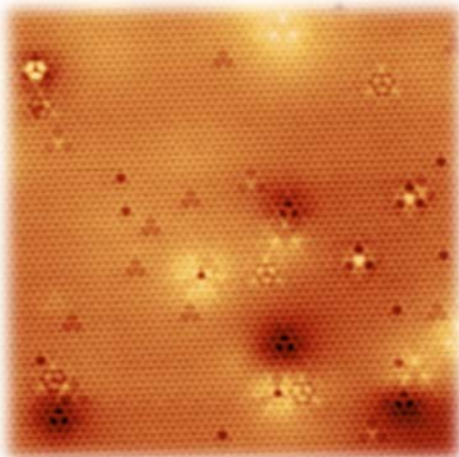
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Geneva, April 2024

## PhD and Postdoc POSITIONS – UNIVERSITY OF GENEVA

### SCANNING PROBE STUDIES OF TUNABLE ELECTRONIC PROPERTIES IN CORRELATED 2D ELECTRON SYSTEMS

*University of Geneva, Switzerland – Department of Quantum Matter Physics*



The group of Pr Christoph Renner at the **University of Geneva in Switzerland** invites applications for highly motivated **PhD and postdoctoral students** with a solid background in condensed matter physics (and scanning probes for the postdoc). The successful candidates will study **electronic properties of low dimensional correlated electron materials as a function thickness, strain, and space charge doping**. The scientific focus is on **charge order, topological and superconducting phases**. The prime techniques are low temperature scanning tunneling microscopy (STM) and atomic force microscopy (AFM) in ultra-high vacuum. They will be involved in all aspects of the research, from improving instrumentation to acquiring and analysing the data. They will have access to several state-of-the-art low

temperature STMs (some combined with AFM) in ultra-high vacuum and (vector) magnetic field, combined with a range of in-situ surface preparation and surface analysis techniques. They will benefit from close proximity to other laboratories, including crystal growth, transport measurements, optical spectroscopy and various material characterization techniques, device fabrication, an outstanding workshop, engineering and extensive theory support.

You have an excellent education in solid-state physics? You are prepared to work in a fast moving and challenging field? This offer is for you. Send your application including CV, list of publications, a one-page description of scientific interests and motivations, a list of master courses followed and corresponding grades, and two references to Pr Renner ( [christoph.renner@unige.ch](mailto:christoph.renner@unige.ch) ).

The University of Geneva is an equal opportunity institution, offering a very stimulating academic environment and competitive salaries. The physics section counts many groups of top international level (experiment and theory) working on different aspects of synthetic materials with novel electronic properties. The PhD positions are for a nominal period of 4 years, the postdoc for 2 years. The University of Geneva further benefits from being located in the city centre and only a short distance from beautiful places along the lake and in the Alps.

**Application deadline: May 2024 or until position is filled. Starting date: Summer 2024 or as agreed.**

This is your opportunity to join a dynamic team with outstanding experimental facilities in a contemporary field of research. For additional information, please contact Pr Ch. Renner.