

## PhD Position in Topological Strongly Correlated Magnetic Systems (B05) Johannes Gutenberg-Universität Mainz, Germany

We are pleased to announce the opening of a PhD position in computational solid-state physics in the Institute of Physics at the Johannes Gutenberg-Universität Mainz **working on aspects of topological materials controlled by strain (computational and phenomenological)** supported by the newly funded SFB ElastoQmat. The appointment involves research under supervision of **Jairo Sinova** and **Libor Šmejkal**, and in direct collaboration with the experimental and theoretical research partners in Mainz and with the partners in Goethe University Frankfurt (**Roser Valenti**) and Karlsruhe Institute of Technology. The Sinova Group conducts research in a broad range of topics related to spin phenomena and theoretical condensed matter physics. Furthermore, the position incorporates the opportunity within SPICE, the Spin Phenomena Interdisciplinary Center, to lead interdisciplinary research.

A background in computational techniques in condensed matter and materials theory is required. Candidates interested and/or experienced in electronic structure calculations, density functional theory, Hubbard and many-body models, and calculations at large-computing-infrastructures are highly suited for this opportunity. Further information can be found on the websites <https://transregio288.org/>, <http://www.sinova-group.physik.uni-mainz.de/> and <http://www.spice.uni-mainz.de/>. The prospective group member must hold a MSc or equivalent diploma. An experience with VASP package, Wannier90 package, python scientific libraries, code-parallelization, and knowledge of topological insulators, dynamical mean-field theory, strain effects, and spintronics is an advantage.

Johannes Gutenberg-Universität Mainz is an equal opportunity, affirmative action employer in compliance with German disability laws. Women and persons with disabilities are encouraged to apply.

Review of applications begins immediately and will continue until the position is filled. Interested applicants should send a curriculum vitae, a list of publications, and at least two letters of recommendation to [sinova-group@uni-mainz.de](mailto:sinova-group@uni-mainz.de). When sending applications please use the subject line "ElastoQmat PhD position application B05".

Prof. Dr. Jairo Sinova  
Institute of Physics  
Staudingerweg 7  
55128 Mainz  
Germany  
E-mail: [sinova-group@uni-mainz.de](mailto:sinova-group@uni-mainz.de)  
Phone (office): +49 6131 39 23642  
<http://www.sinova-group.physik.uni-mainz.de/>  
<http://www.spice.uni-mainz.de/>