

Elastic Manipulation and Dynamics of Quantum Materials

International Seminar and Workshop

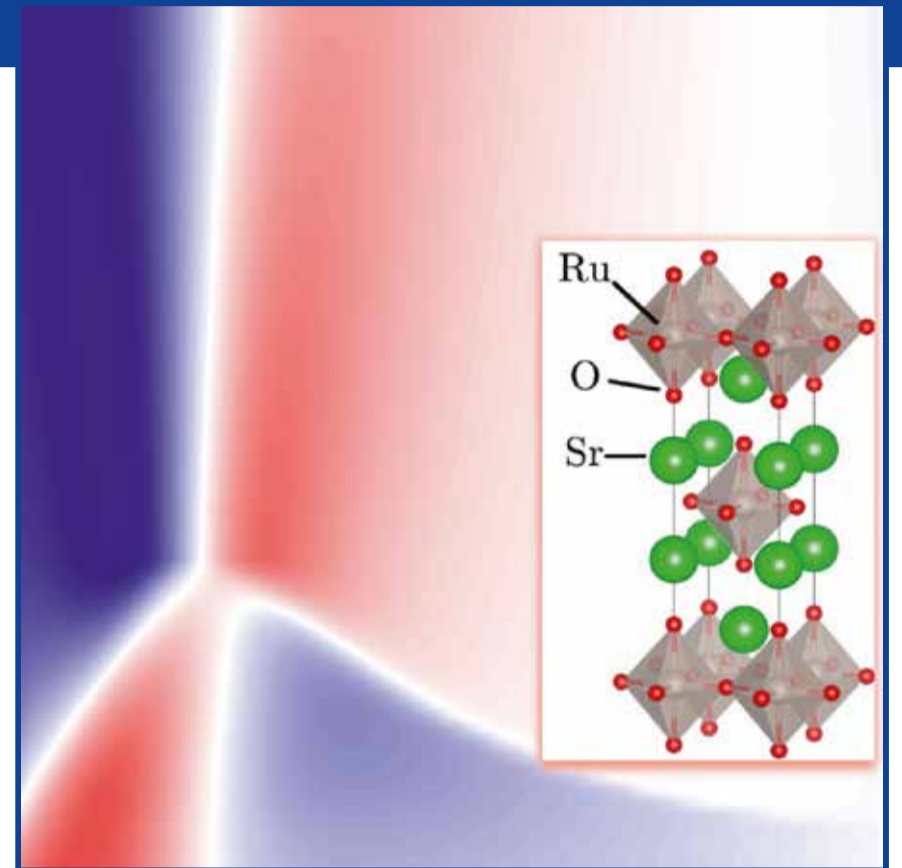
31 July - 11 August 2023

(workshop week: 31 July - 4 August 2023)

An exciting recent development in condensed matter physics is concerned with effects of elastic tuning and response of various types of electronic order in a broad range of quantum materials. This workshop aims at bringing together experimentalists and theorists in the field to discuss and develop an understanding of equilibrium and out-of-equilibrium coupling of electronic and elastic degrees of freedom in strongly-correlated materials.

Topics:

- Quantum criticality in strain-tuned systems: what are the experimental observations and theoretical approaches?
- 2D van der Waals and Moiré structures: what is the role of elastic coupling?
- Topological order: what is the role of topology in correlated electronic systems with strong coupling to elastic degrees of freedom?
- In and out of equilibrium dynamics of electronic systems: what are the experimental observations and theoretical approaches?



Invited speakers: *to be confirmed

Erez Berg (IL)
Christian Bernhard (CH)
Stuart Brown (US)
Paul Canfield (US)
Andrea Cavalleri (DE)
Premala Chandra (US)
Andrey Chubukov (US)
Laura Classen (DE)
Piers Coleman* (US)
Rafael Fernandes (US)
Ian Fisher (US)
Elena Gati (DE)
Malte Grosche (UK)
Bernhard Keimer (DE)
Igor Mazin (US)
Marie-Aude Measson (FR)
Hilary Noad (DE)
Peter Oppeneer (SE)
Abhay Pasupathy (US)
Srinivas Raghu (US)

Sangeeta Sharma (DE)
Libor Šmejkal (DE)
Sofia Michaela Souliou (DE)
Ronny Thomale (DE)
Thais Trevisan (US)
Maia G. Vergniory (DE)
Matthias Vojta (DE)
Stephen Wilson (US)
Hiroshi Yamamoto (JP)

Scientific coordinators:

Jörg Schmalian
Karlsruhe, Germany
Jairo Sinova
Mainz, Germany
Roser Valentí
Frankfurt, Germany

Organisation:

Mandy Lochar
MPIPKS Dresden

Applications received before 30th April 2023 are considered preferentially.

We aim for an in person workshop with all participants on-site.

Applications are welcome and should be made by using the application form on the event web page (see contact details on the right). The number of attendees is limited. The **registration fee** for the international seminar and workshop is 140 Euro and should be paid by all participants. **Accommodation** will be covered by the Max Planck Institute. Limited funding is available to partially cover **travel expenses**.

For further information please contact:

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