MAX PLANCK GESELLSCHAFT

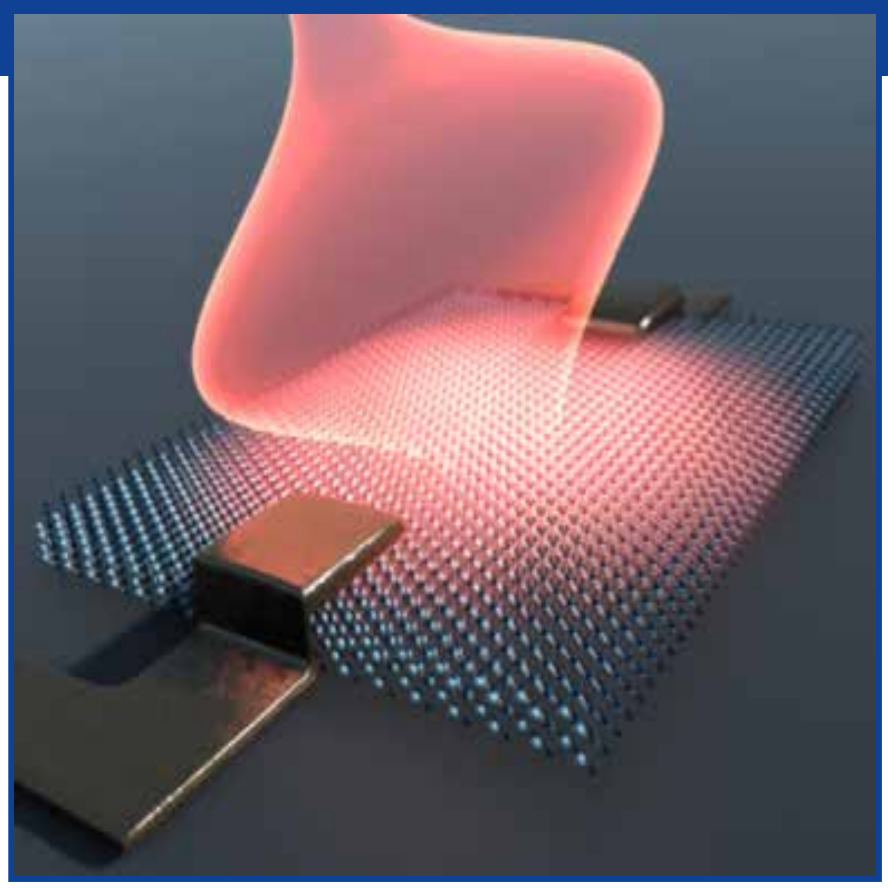
mpipks

Dynamical Control of Quantum Materials

Max Planck Institute for the Physics of Complex Systems

International Workshop
22 - 26 May 2023

This workshop aims at identifying strategies for developing a unified understanding of nonthermal pathways to control quantum materials with light by bringing together experimentalists and theorists in the field. A main goal is to establish a roadmap for creating next-generation technologies based on ultrafast light-matter interactions in solids.



Topics:

- **Designer metastable phases:** How can we control effective energy landscapes out of thermal equilibrium?
- **Dressed nonequilibrium states in light of dissipation**: How can Floquet engineering be achieved in solids?
- **Nonlinear responses:** How can we bridge nonlinear optics and pump-probe spectroscopies?
- **Towards quantum technologies:** How can ultrafast light-matter interactions be harnessed as a resource for quantum technological applications?

Invited speakers:

Monika Aidelsburger (DE)
Richard Averitt (US)
Edoardo Baldini (US)
Uwe Bovensiepen (DE)
Martin Claassen (US)
Alberto de la Torre (US)
Martin Eckstein (DE)
Daniele Fausti (DE)
Simon Gerber (CH)
Isabella Gierz-Pehla (DE)
Rupert Huber (DE)
Stefan Kaiser (DE)
Sebastian Klembt (DE)
Anshul Kogar (US)
Fahad Mahmood (US)
Aditi Mitra (US)
Matteo Mitrano (US)
Prineha Narang (US)
Takashi Oka (JP)
Laurenz Rettig (DE)
Claus Ropers (DE)
Hélène Seiler (DE)
Ryo Shimano (JP)
Philipp Werner (CH)

Scientific coordinators:

Dante Kennes
Aachen, Germany

James McIver,
NY, USA

Michael Sentef,
Hamburg, Germany

Organisation:

Mandy Lochar
MPIPKS Dresden

Applications received before 28th February 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 workshop web page (see contact details on the right). The number of attendees is limited. The **registration fee** for the international workshop is 140 Euro and should be paid by all participants. Costs for **accommodation and meals** 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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We also offer individual fellowships (phd, postdoc, sabbatical). Applications are accepted continuously. For details, please check www.pks.mpg.de/visitors