



FRIAS Junior Researcher Conference

Beyond Molecular Movies:

Bringing time-domain spectroscopy to diffraction imaging

September 13 - 15, 2017

FRIAS, Albertstr. 19, Seminar Room

Confirmed Speakers:

Peter Baum
Jens Biegert
Henry Chapman
Nirit Dudovich
Markus Fiederle
Luca Giannessi
Markus Gühr
Bernd v. Issendorff
Jochen Küpper
Fernando Martin
Dwayne Miller
Shaul Mukamel
Thomas Pfeifer
Kevin Prince
Giuseppe Sansone
Robin Santra

Diffraction imaging techniques offer the possibility to spatially resolve molecular structures with sub-angstrom resolution. Combined with femtosecond time resolution, a full map of the dynamics is possible. To study in addition coherent effects, amplitude and phase information of the quantum states needs to be retrieved of which the latter is not directly captured in diffraction imaging techniques. Here, coherent nonlinear spectroscopy is the ideal methodology. As such, a combination of these cutting-edge techniques would provide a complete quantum mechanical picture of molecular dynamics.

For this conference, we wish to bring together leading researchers in the fields of diffractive imaging and nonlinear spectroscopy to discuss both the current research and future directions.

Scientific Coordinator:

Lukas.Bruder@physik.uni-freiburg.de
Simon.Dold@physik.uni-freiburg.de
Aaron.LaForge@physik.uni-freiburg.de

