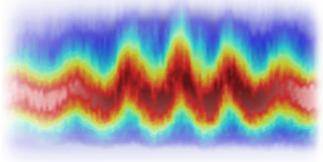




Beyond Molecular Movies: Bringing time-domain spectroscopy to diffraction imaging

13 - 15 September 2017

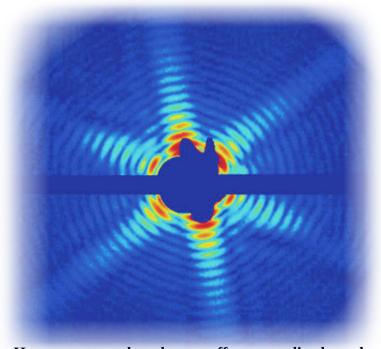
A principal goal in chemistry and physics is to fully map the dynamics on electronic timescales thereby "making a molecular movie" of the chemical processes. This can be applied to a wide range of species from the complex such as how a protein unfolds essential in molecular biology to the simple such as proton transfer in water important radical formation in atmospheric chemistry. Spatially, one must attain subangstrom resolution in order to structurally image the molecule while controlling the various degrees of rotational and vibrational freedom. Temporally, femtosecond to subfemtosecond resolution is needed to resolve the nuclear and electronic dynamics.



Confirmed Speakers:

Jens Biegert
Nirit Dudovich
Luca Giannessi
Bernd v. Issendorff
Fernando Martin
Shaul Mukamel
Kevin Prince
Robin Santra

Henry Chapman Michael Fiederle Markus Gühr Jochen Küpper Dwayne Miller Thomas Pfeiffer Giuseppe Sansone



However, to study coherent effects, amplitude and phase information of quantum states has to be retrieved of which the latter is not directly captured in diffraction imaging techniques. Thus, complementary methods with high phase sensitivity are required which are commonly developed in the ultrafast spectroscopy community.

For this conference, we wish to bring together the scientists working in the fields of molecular imaging and nonlinear spectroscopy to discuss the recent developments and possible outlooks in the field. We invite especially young researchers and students with interest in this topic to participate.

Scientific Coordinators:

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https://www.frias.uni-freiburg.de/molmov

Conference Venue

FRIAS, Albertstr. 19, 79104 Freiburg im Breisgau





