

# Symposium Electronic 2D Spectroscopy from Small to Large Systems (SYED)

jointly organized by  
the Molecular Physics Division (MO), and  
the Quantum Optics and Photonics Division (Q)

Tobias Brixner  
Lehrstuhl für Physikalische Chemie I  
Universität Würzburg  
Am Hubland  
97074 Würzburg  
brixner@phys-chemie.uni-  
wuerzburg.de

Thomas Pfeifer  
Forschungsgruppe InterAtto  
MPI für Kernphysik, Heidelberg  
Saupfercheckweg 1  
69117 Heidelberg  
tpfeifer@mpi-hd.mpg.de

Eberhard Riedle  
Lehrstuhl für BioMolekulare Optik  
Ludwig-Maximilians-Universität  
Oettingenstr. 67  
80538 München  
riedle@physik.uni-muenchen.de

Coherent two-dimensional (2D) spectroscopy is one of the hottest topics in modern optical investigations. The methods originally developed for NMR measurements have been adapted first to the IR region but now more and more groups have pushed the reachable spectral range via the 800 nm region to the visible and lately even to the UV and XUV. The symposium is aimed to introduce a general audience to the topic and technologies. We want to promote full harvesting of the scientific possibilities for new insight into physical, chemical and biological processes and ultrafast dynamics. The talks span the full range from electrons in atoms to biological systems.

## Overview of Invited Talks and Sessions

(lecture room E 415)

### Invited Talks

SYED 1.1	Mon	11:00–11:30	E 415	<b>Signatures of vibronic and vibrational coherences in electronic 2D-spectra of monomers and aggregates</b> — FRANZ MILOTA, TOMAS MANCAL, HARALD F. KAUFFMANN, •JÜRGEN HAUER
SYED 1.2	Mon	11:30–12:00	E 415	<b>Beatings in Electronic 2D Spectroscopy</b> — •TÖNU PULLERITS
SYED 1.3	Mon	12:00–12:30	E 415	<b>Resonant 2D Raman Spectroscopy</b> — •TIAGO BUCKUP, JAN PHILIP KRAACK, MARCUS MOTZKUS
SYED 1.4	Mon	12:30–13:00	E 415	<b>Coherent Two-Dimensional Electronic Spectroscopy With Triggered Exchange</b> — •PATRICK NUERNBERGER, STEFAN RUETZEL, MARTIN KULLMANN, JOHANNES BUBACK, TOBIAS BRIXNER
SYED 2.1	Mon	14:00–14:30	E 415	<b>Two-dimensional UV and visible spectroscopy of biological system</b> — •MAJED CHERGUL, GERALD AUBÖCK, CRISTINA CONSANI, ROBERTO MONNI, ANDRÉ EL HADDAD, FRANK VAN MOURIK
SYED 2.2	Mon	14:30–15:00	E 415	<b>Ultrabroad 2D-UV spectroscopy: from coherent internal conversion in pyrene towards exciton dynamics in DNA</b> — •IGOR PUGLIESI, NILS KREBS, EBERHARD RIEDLE
SYED 2.3	Mon	15:00–15:30	E 415	<b>Multidimensional XUV-NIR spectroscopy of electronic dynamics in small quantum systems</b> — •CHRISTIAN OTT, ANDREAS KALDUN, KRISTINA MEYER, PHILIPP RAITH, MARTIN LAUX, ALEXANDER BLÄTTERMANN, THOMAS DING, THOMAS PFEIFER
SYED 2.4	Mon	15:30–16:00	E 415	<b>Correlated Two-electron Wave-Packets in Helium</b> — •JAVIER MADRONERO

### Sessions

SYED 1.1–1.4	Mon	11:00–13:00	E 415	<b>Electronic 2D Spectroscopy from Small to Large Systems I</b>
SYED 2.1–2.4	Mon	14:00–16:00	E 415	<b>Electronic 2D Spectroscopy from Small to Large Systems II</b>