

# Program

## Sunday, 27 January 2013

17:00 – 21:00 Registration

18:00 *WELCOME SUPPER*

## Monday, 28 January 2013

07:30 *BREAKFAST*

08:30 – 09:00 Manfred Lein **Welcome words**  
Ernst Dreisigacker **About the Wilhelm and Else Heraeus Foundation**

09:00 **CORRELATION & MOLECULES**: Chair Hans Jakob Wörner

09:05 – 09:50 David Villeneuve **Inner shell excitation during high harmonic generation – the giant resonance in Xenon**

09:50 – 10:35 Alejandro Saenz **Molecular high-harmonic spectra: From molecular hydrogen to water molecules**

10:35 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Caterina Vozzi **High-order harmonic spectroscopy: towards dynamic molecular imaging**

11:45 – 12:10 Ágnes Vibók **Simulation of laser-induced quantum dynamics of the electronic and nuclear motion in the ozone molecule on the attosecond time scale**

12:15 **Conference Photo** (in the front of the Physikzentrum)

12:20 *LUNCH*

# Program

**Monday, 28 January 2013**

- 14:30            **STRONG-FIELD IONIZATION**: Chair Misha Ivanov
- 14:35 – 15:20   Jan Michael Rost            **Soft and hard recollisions in light matter interaction**
- 15:20 – 16:05   Alexandra Landsman           **Tunneling time is real in attosecond science**
- 16:05 – 16:30   *COFFEE BREAK*
- 16:30 – 17:15   Camilo Ruiz                            **Ionization dynamics in single and double ionization of Helium**
- 17:15 – 18:15   **Poster previews**
- 18:15            *DINNER*
- 19:30            **Poster session**

# Program

**Tuesday, 29 January 2013**

- 08:00            *BREAKFAST*
- 09:00            **ATTOSECOND PHYSICS**: Chair Christian Spielmann
- 09:05 – 09:50   Reinhard Kienberger            **Attosecond spectroscopy on molecules and solid surfaces**
- 09:50 – 10:35   Armin Scrinzi                            **Electron and harmonic spectra at elliptic polarization**
- 10:35 – 11:00   *COFFEE BREAK*
- 11:00 – 11:45   Nirit Dudovich                        **Looking inside the recollision process**
- 11:45 – 12:10   Katharina Doblhoff-Dier            **Attosecond-recollision-controlled selective fragmentation of acetylene<sup>2+</sup>**
- 12:15            *LUNCH*

# Program

**Tuesday, 29 January 2013**

- 14:30            **XUV SPECTROSCOPY**: Chair Alfred Maquet
- 14:35 – 15:20   Markus Drescher            **Tracing electron correlation dynamics with the THz streak camera**
- 15:20 – 16:05   Thomas Pfeifer            **Multidimensional soft-x-ray spectroscopy with high harmonics: Tuning from perturbative to strong coupling of two excited electrons, and Fano control, in Helium atoms**
- 16:05 – 16:30   *COFFEE BREAK*
- 16:30 – 17:15   Helmut Zacharias            **High harmonic photoelectron spectroscopy at surfaces**
- 17:15 – 18:00   Horst Rottke            **Tracking of a Fano-wavepacket in the ionization continuum of an atom**
- 18:15            *DINNER*
- 19:30            **Poster session**

# Program

**Wednesday, 30 January 2013**

08:00	<i>BREAKFAST</i>	
09:00	<b><u>MOLECULES</u></b> : Chair Stefan Hässler	
09:05 – 09:50	Pascal Salières	<b>Phase distortions of attosecond pulses induced by electronic resonances and dynamical interferences</b>
09:50 – 10:35	Carla Figueira de Morisson Faria	<b>Quantum interference, multiple orbitals and Bohmian-trajectory analysis of high-harmonic generation</b>
10:35 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Lars Madsen	<b>Tunneling ionization of molecules and multiphoton above threshold effects in strong-field fragmentation</b>
11:45 – 12:10	Peter Kraus	<b>High-harmonic spectroscopy of oriented polyatomic molecules</b>
12:15	<i>LUNCH</i>	

# Program

**Wednesday, 30 January 2013**

## Free time

16:00 – 16:15 *COFFEE BREAK*

16:15 **HHG AND APPLICATIONS:** Chair David Villeneuve

16:20 – 17:05 Olga Smirnova **Attosecond larmor clock**

17:05 – 17:50 Bernd Abel **Ultrafast soft X-ray photoelectron spectroscopy at liquid water microjets**

17:50 – 18:15 Alexander Blättermann **High-order harmonic generation at 4 MHz repetition rate using a sub- $\mu$ J Ti-sapphire femtosecond oscillator**

18:15 *CONFERENCE DINNER*

*Followed by a social evening on invitation  
of the Wilhelm and Else Heraeus Foundation  
in the Physikzentrum*

# Program

Thursday, 31 January 2013

08:00	<i>BREAKFAST</i>	
09:00	<b><u>CONTROL OF HHG</u></b> : Chair Giuseppe Sansone	
09:05 – 09:50	Yann Mairesse	<b>High harmonic spectroscopy of SF<sub>6</sub> molecules</b>
09:50 – 10:35	Thomas Halfmann	<b>Adiabatically-enhanced frequency conversion</b>
10:35 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Amelle Zair	<b>Molecular internal dynamics studied by quantum path interferences in high order harmonic generation</b>
11:45 – 12:10	Vasily Strelkov	<b>Theory of resonant high harmonic generation as a four-step process</b>
12:15	<i>LUNCH</i>	

# Program

**Thursday, 31 January 2013**

- 14:30            **ALTERNATIVE HHG SOURCES**: Chair Milutin Kovacev
- 14:35 – 15:20    Gerhard Paulus            **Observation of amplified emission in relativistic surface high-harmonic generation**
- 15:20 – 16:05    Rashid Ganeev            **High-order harmonic generation in laser plasma plumes: recent trends**
- 16:05 – 16:30    *COFFEE BREAK*
- 16:30 – 17:15    Ingmar Hartl            **Frequency combs and precision spectroscopy in the extreme ultraviolet**
- 17:15 – 17:40    Heiko Kurz            **Systematic studies of high-order harmonic generation from water microdroplets**
- 17:40 – 17:45    **Concluding remarks and awarding of the poster prizes**
- 18:00            *DINNER*
- 19:30            **Poster session**

**Friday, 1 February 2013**

08:00            *BREAKFAST*

**End of the seminar and departure**