

Wednesday, 23rd June

Until 18:00 **Arrival and registration**

18:30 **Dinner**

19:30 **Posters** (with drinks)

Thursday, 24th June

08:45 **Welcome**

09:00 – 10:45 **Session 1.1 Controlled Reactions**

Chair: Stephan Schiller (U Düsseldorf, D)

09:00 Fleming Crim (U Wisconsin, Madison, USA)
Vibrational State Control of Bimolecular Reactions

09:35 Frank Stienkemeier (U Bielefeld, D)
Formation of Exciplexes on the Surface of Superfluid vs. Normalfluid Helium Nanodroplets

10:10 Stephan Schlemmer (R. and B. Sackler Laboratory, Leiden, NL)
Laser-controlled Reactions in Ion Traps

10:45 – 11:15 **Coffee Break**

11:15 – 13:00 **Session 1.2 Charge Transfer**

Chair: Reinhard Dörner (U Frankfurt, D)

11:15 Brett DePaola (KSU Manhattan (KS), USA)
MOTRIMS: A Source of Surprising Results in Single Charge Transfer Collisions Experiments

11:50 Ronnie Hoekstra (KVI Groningen, NL)
Charge Transfer Studied with MOTRIMS: Impact Parameter Dependencies and Inner-shell Processes

12:25 Andreas Wolf (MPI-K Heidelberg, D)
Dissociative Recombination of H_3^+ Ions with Cold Electrons

13:00 – 14:30 **Lunch Break**

14:30 – 16:15 **Session 1.3 Laser-assisted Collisions**

Chair: Alfred Maquet (U Pierre et Marie Curie, Paris, F)

14:30 Richard Taïeb (U Pierre et Marie Curie, Paris, F)
Theory of Laser-assisted ($e,2e$) Collisions

- 15:05 Alexander Dorn (MPI-K Heidelberg, D)
Experiments on Laser-assisted (e,2e) Collisions
- 15:40 Tom Kirchner (U Clausthal, D)
Electron Transfer Dynamics in Laser-Assisted Collisions
- 16:15 – 16:45 Coffee Break**
- 16:45 – 18:30 Session 1.4 Reactive Scattering**
Chair: Claus Dieter Schröter (MPI-K Heidelberg, D)
- 16:45 Piero Casavecchia (U of Perugia, I)
Crossed Molecular Beam Reactive Scattering: Towards the "Universal" Product Detection by "Soft" Electron Impact Ionization
- 17:20 Roland Wester (U Freiburg, D)
Manipulating the Dynamics of Ion-Molecule Reactions
- 17:55 Stefan Schmatz (U Göttingen, D)
State-selected Dynamics of Complex-forming Elementary Chemical Reactions
- 19:00 Heraeus Dinner**

Friday, 25th June

- 09:00 – 10:45 Session 2.1 Laser Manipulation**
Chair: Robert Moshhammer (MPI-K Heidelberg, D)
- 09:00 Markus Drescher (U Bielefeld, D)
Attosecond Metrology: Manipulating Electron Wavepackets with Light
- 09:35 Zohar Amitay (Technion, Haifa, IL)
State-selective Coherent Control of Large Molecular Populations
- 10:10 Henrik Stapelfeldt (U Aarhus, DK)
Laser Alignment of Molecules with Short Laser Pulses
- 10:45 – 11:15 Coffee Break**
- 11:15 – 13:00 Session 2.2 Coherent Control and Decoherence**
Chair: Matthias Weidemüller (U Freiburg, D)
- 11:15 Thomas Baumert (U Kassel, D)
Quantum Control in Intense Phase Shaped Laser Fields
- 11:50 Tobias Brixner (U of California, Berkeley, USA)
Adaptive Quantum Control of Femtochemistry
- 12:25 Walter Strunz (U Freiburg, D)
Decoherence of Few-Body Systems

- 13:00 – 14:30** **Lunch Break**
- 14:30 – 16:15** **Session 2.3 Atoms and Molecules in Strong Fields**
Chair: Wolfgang Sandner (MBI, Berlin, D)
- 14:30 Hanspeter Helm (U Freiburg, D)
Fragmentation in Weak and Strong Laser Fields
- 15:05 Ekaterina Eremina (MBI, Berlin, D)
Non-Sequential Double Ionization of Atoms and Molecules
- 15:40 Manfred Lein (MPI-PKS, Dresden, D)
High-Harmonic Generation in Small Molecules
- 16:15 – 16:45** **Coffee Break**
- 16:45 – 18:30** **Session 2.4 Molecules and Clusters in Strong Fields**
Chair: Jan Posthumus (U catholique de Louvain, B)
- 16:45 Lew Cocke (KSU Manhattan (KS), USA)
Mechanisms for Double Electron Removal From Light Molecules by Intense Laser Pulses: Fast Clocks
- 17:20 Alejandro Saenz (Humboldt U Berlin, D)
Molecular Hydrogen in Intense Laser Fields
- 17:55 Dieter Bauer (MBI Berlin, D)
Clusters in Intense Laser Fields
- 19:00** **Dinner**
- 20:00** **Posters**

Saturday, 26th June

- 08:30 – 10:50** **Session 3.1 Controlled Fragmentation**
Chair: Klaus Bartschat (Drake U, Des Moines (IA), USA)
- 08:30 Wim van der Zande (U Nijmegen, NL)
The Interaction of Sub Picosecond Half Cycle Pulses with Rydberg Atoms: From Photons to Fields
- 09:05 Till Jahnke (U Frankfurt, D)
Electrons from Fixed-in-Space Molecules and Clusters
- 09:40 Bernold Feuerstein (MPI-K Heidelberg, D)
Wave Packet Imaging of H_2^+ with Ultrashort Laser Pulses
- 10:10 Uwe Thumm (KSU Manhattan (KS), USA)
Laser-driven Quantum Dynamics in Half and Full Collisions: Fragmentation of H_2^+ and Laser-assisted Charge Transfer in $p+H$ Collisions

10:50 – 11:15 **Coffee Break**

11:15 – 13:00 **Session 3.2 Cluster Dynamics**

Chair: Tom Kirchner (U Clausthal, D)

11:15

Jan-Michael Rost (MPI-PKS, Dresden, D)

Rare Gas Clusters under 800 nm, 100 nm Intense Laser Pulses and their Combined Radiation in a Pump-Probe Scheme

11:50

Bernd von Issendorff (U Freiburg, D)

Electron Emission from Free Sodium Clusters in “Mild” Femtosecond Laser Fields

12:25

Daniel Zajfman (Weizmann Inst., Rehovot, IL)

Electron Impact Detachment of Small Negative Clusters

13:00

Concluding remarks

13:30

Lunch

End of the Seminar