

IMPRS-APS Annual Meeting

Ringberg Castle, July 15-18, 2012

Program

Monday, July 16th

8:00 to 9:00

Breakfast

9:00

Welcome

Session I

9:10 – 9:35

Casey Chew

Progress Report of Time-of-Flight Photoemission Electron Microscopy using Ultrashort Laser Pulses

9:35 – 10:00

Alexander Gliserin

Compression of Single-Electron Pulses with Microwave Fields – Characterization in the Energy Domain

10:00 – 10:25

Matt Walbran

Single Electron Compression for Ultrafast Electron Diffraction

10:25 – 10:50

Coffee Break

10:50 – 11:15

Jianhui Bin

A Laser-Driven Nanosecond Proton Source for Radiobiological Studies, Part I

11:15 – 11:40

Nicole Humble

A Laser-Driven Nanosecond Proton Source for Radiobiological Studies, Part II

11:40 – 12:05

Deniz Tuna

Quantum Chemical Investigations into the Photophysics and Photochemistry of Bioorganic Molecules

12:30 – 14:00

Lunch

Session II

14:00 – 14:25

Lauryna Lötscher

Single-Pass High-Harmonic Generation at 50 MHz Repetition Rate

14:25 – 14:50

Daniel Rivas

*5-fs, Multi-Terawatt Optical Parametric Chirped Pulse Amplifier
Development*

14:50 – 15:15

Vinay Pramod Majety

*Interfacing Quantum Chemistry with Physics: Transition
Probabilities for Molecular Single Photo-Ionization*

15:15 – 15:40

Xiaoqing Zhou

*Control of Microwave Signals Using Circuit Nano-
Electromechanics*

15:40 – 16:05

Coffee Break

16:05 – 16:30

Johannes Wenz

*X-Ray Phase-Contrast Tomography from a Laser-Driven
Betatron Source*

16:30 – 16:55

Shao-Wei Chao

Progress of Electron Acceleration

16:55 – 17:20

Sebastian Raith

*Longitudinal Position-Energy Correlation of Laser-Accelerated
Electrons*

17:20 – 17:45

Michael Förster

Metal Nanotips Illuminated with Few-Cycle Pulses

17:45 – 18:10

Constantin Klier

PIC Code for Strong-Field Plasma Physics: Current Status

18:30

Dinner

Tuesday, July 17th

8:00 – 9:00

Breakfast

Session III

9:00 – 9:25

Elisabeth Bothschafter

Attosecond Transient Absorption of SiO₂

9:25 – 9:50

Annkatriin Sommer

*Attosecond Time-Resolved Investigation of Dynamics in Solid
Systems*

- 9:50 – 10:15 **Kellie Pearce**
Using PEEM to Investigation Propagation Dynamics of SPPs
- 10:15 – 10:40 **Coffee break**
- 10:40 – 11:05 **Sandro Klingebiel**
Overview and Status of the PFS Laser
- 11:05 – 11:30 **Christoph Wandt**
Development of Diode-Pumped Yb:YAG Multi-pass Amplifiers
- 11:30 – 11:55 **Alexander Kessel**
Ultra-Broadband Seed Generation by Noncollinear OPA
- 11:55 – 12:05 **Alissa Wiengarten**
Structural and Electronic Properties of Functional Molecules on Surfaces
- 12:30 **Lunch**
- Session IV**
- 14:00 – 14:25 **Antoine Moulet**
Real-Time Observation of Transient Induced Field-Ionization
- 14:25 – 14:50 **Alexander Schwarz**
Sub-two cycle IR OPCPA for HHG
- 14:50 – 15:15 **Tim Paasch-Colberg**
Control of Electric Currents in Solids at the Frequency of Visible Light
- 15:15 – 15:40 **Sabine Keiber**
Controlling Electron Dynamics in Solids with Synthesized Infrared Electric Fields
- 15:40 – 16:05 **Coffee break**
- 16:05 – 16:30 **Katharina Doblhoff**
Carrier-Envelope-Phase-Dependent Fragmentation of $C_2H_2^{2+}$
- 16:30 – 16:55 **Robert Grummt**
On the Justification of the Dipole Approximation
- 16:55 – 17:20 **Michael Korbman**
Interaction Between a Strong Field and a Dielectric
- 17:20 – 17:45 **Mattia Lupetti**

High Harmonic Generation in Tapered Nanoplasmonic Waveguides

17:45 – 18:10

Daniel Strobusch

A General Kinetic Energy Operator in Arbitrary Coordinates

18:30

Bavarian Evening

Wednesday, July 18th

8:00 – 9:00

Breakfast

Session V

9:00 – 9:25

Matthias Kübel

Nonsequential Double Ionization: From the Single- to the Many-Cycle Regime

9:25 – 9:50

Renate Pazourek

Theory of Attosecond Delays in Photoionization

9:50 – 10:15

Michael Jobst

Recent Progress in Attosecond Electron Dynamics in Molecules

10:15 – 10:50

Coffee break

10:50 – 11:15

Sebastian Thomas

Enhanced Optical Near-Fields at Sharp Metal Tips

11:15 – 11:40

Georg Wachter

Theoretical Aspects of Laser-Nanotip Interaction

11:40 – 12:05

Marcus Seidel

Population and Dynamics of Two-Exciton States in PBI J-Aggregates

12:30

Lunch