

AttoChem YSS 2023 - CONFERENCE SCHEDULE

Time	Wednesday 13.09	Thursday 14.09	Friday 15.09
09:00 – 09:20	Welcome	Invited Lecture V. Hanus	Invited Lecture R. F. E. Silva
09:20 – 09:40	Invited Lecture M. Richter	Contributed Talk L. Mai	Contributed Talk D. Alam
09:20 – 10:00			
10:00 – 11:00	TUTORIAL molecular dynamics M. Vacher	TUTORIAL e-dynamics in atoms G. Sansone	TUTORIAL e-dynamics in solids C. Lemell
11:00 – 11:30	Coffee break	Coffee break	Coffee break
11:30 – 12:10	Invited Paper Talk G. Borisova	Invited Paper Talk R. Weissenbilder	Contributed Talk P. Suthar
			Contributed Talk V. Utrio Lanfaloni
12:10 – 12:30	Contributed Talk C. H. Yuen	Contributed Talk A. Weber	Contributed Talk V. Korolev
12:30 – 14:20	LUNCH	LUNCH	LUNCH
14:20 – 15:20	TUTORIAL molecular dynamics F. Lépine	TUTORIAL e-dynamics in atoms M. Dahlström	TUTORIAL e-dynamics in solids M. Schultze
15:20 – 16:00	Invited Paper Talk T. Balčiūnas	Invited Lecture A. Maxwell	Invited Paper Talk S. Mandal
16:00 – 16:30	1-min POSTER presentations	Coffee break	Coffee break
16:30 – 16:50	POSTER session networking + discussions	Contributed Talk R. Tahouri	Contributed Talk F. Vismarra
16:50 – 17:10		Contributed Talk M. Amitzböll	“Round Table Discussion”
17:10 – 17:30		POSTER session	
17:30 – 18:00			
18:00 – 18:20	networking + discussions	networking + discussions	Concluding Remarks

All lectures will take place in [FH Hörsaal 5](#) (green area, 2nd floor; [map](#)) and the poster sessions in [A05](#), directly in front of the lecture room.

Length of Lectures:

- **Tutorials** – 50' presentation + 10' Q&A&D
- **Invited talks** – 35' presentation + 5' Q&A&D
- **Invited Paper Talks** – 25' presentation + 15' Q&A&D
- **Contributed talks** – 15' presentation + 5' Q&A&D

Wednesday (13 September 2023)

09:00 – 09:20 **Welcome**

Chair: **S. Carlström**

09:20 – 10:00 **M. Richter**, *Towards remote air lasing by efficient generation of population inversion in molecular nitrogen ions*

10:00 – 11:00 **M. Vacher**, *Theory of ultrafast processes in molecules*

11:00 – 11:30 Coffee break

Chair: **P. Carpeggiani**

11:30 – 12:10 **G. Borisova**, *Laser control of an excited-state vibrational wave packet in neutral H₂*

12:10 – 12:30 **C. H. Yuen**, *Probing Vibronic Coherence in Charge Migration of Molecules Using Strong Field Sequential Double Ionization*

12:30 – 14:20 Lunch

Chair: **A. Baltuška**

14:20 – 15:20 **F. Lépine**, *Ultrafast attosecond experiments in molecules, state-of-the-art and perspectives*

15:20 – 16:00 **T. Balčiūnas**, *Photoinduced Proton Transfer Dynamics in Aqueous Urea Solution Probed by Water-Window X-ray Absorption Spectroscopy*

16:00 – 16:30 **1-min poster presentations**

16:30 – 18:00 **Poster session**

Thursday (14 September 2023)

Chair: **M. Kitzler-Zeiler**

09:00 – 09:40 **V. Hanuš**, *Attosecond Imaging and Control of Electronic Processes in Elliptically Polarized Few-Cycle Laser Pulses*

09:40 – 10:00 **L. Mai**, *Unravelling the ultrafast non-adiabatic dynamics of acetylacetone with sub-20 fs UV-XUV photoelectron spectroscopy*

10:00 – 11:00 **G. Sansone**, *Ultrafast electron dynamics in atoms: observables and experimental techniques*

11:00 – 11:30 Coffee Break

Chair: **M. Vacher**

11:30 – 12:10 **R. Weissenbilder**, *Optimizing High-order Harmonic Generation in Gases*

12:10 – 12:30 **A. Weber**, *Optical Tunnelling Without a Barrier? Tracking Ionization Events in a Bichromatic Field*

12:30 – 14:20 Lunch

Chair: **C. Lemell**

14:20 – 15:20 **M. Dahlström**, *Theory for ultrafast dynamical photoemission: cases of dressed continuum, dressed atom and dressed ion*

15:20 – 16:00 **A. Maxwell**, *Entanglement of Orbital Angular Momentum in Non-Sequential Double Ionization*

16:00 – 16:30 Coffee break

Chair: **R. E. F. Silva**

16:30 – 16:50 **R. Tahouri**, *Relativistic treatment of hole alignment due to autoionization processes and Cooper minima in noble gas atoms*

16:50 – 17:10 **M. Ammitzböll**, *Measuring the quantum state of a photoelectron*

17:10 – 18:00 **Poster session**

Friday (15 September 2023)

Chair: **I. Březinová**

09:00 – 09:20 **R. E. F. Silva**, *High harmonic spectroscopy of strongly correlated and topological materials*

09:40 – 10:00 **D. Alam**, *Super-Harmonic Generation in Perovskite BaTiO₃: The Role of Electron-Electron Correlations*

10:00 – 11:00 **C. Lemell**, *Theory of ultrafast and ultrastrong processes in solids*

11:00 – 11:30 Coffee break

Chair: **S. Vovla**

11:30 – 11:50 **P. Suthar**, *Role of optically injected carriers in high harmonic generation in silicon*

11:50 – 12:10 **V. Utrio Lanfaloni**, *Investigating liquid water with X-ray emission spectroscopy using XFEL*

12:10 – 12:30 **V. Korolev**, *Wavelength dependence of High Order Harmonic Generation from a single atomic layer TMDC*

12:30 – 14:20 Lunch

Chair: **A. Bellissimo**

14:20 – 15:20 **M. Schultze**, *tba*

15:20 – 16:00 **S. Mandal**, *Attosecond Field Emission*

16:00 – 16:30 Coffee break

Chair: **A. Bellissimo**

16:30 – 16:50 **F. Vismarra**, *Ultrafast Dynamics in Donor-Acceptor Prototype Molecules by XUV-IR Attosecond Spectroscopy*

16:50 – 18:00 **Round table & discussion**

18:00 Concluding remarks