

SUMMER SCHOOL: ULTRAFAST DYNAMICS WITH INTENSE RADIATION SOURCES 18-22 October 2016 - St. Nicolas Bay resort Hotel in Crete

PROGRAM

MONDAY 17 OCTOBER, 2016

SPECIAL TRAINING SESSION ON PHOTONICS EXPLORER KIT at IESL-FORTH, Seminar Room "Stelios Orphanoudakis" (1st floor)

This section is reserved for the ESRs that have not attended to the Milan Winter School

09.00 - 10.00 | Intro presentation of the Photonics Explorer | T. DE PAUW

Some aspects of the presentation: What is the Photonics explorer, Overview of the modules of the Photonics Explorer, Working with the Photonics explorer to give workshops for teachers and to give workshops to secondary-school students.

10.00 - 11.00	Hands-on experiments PART 1: Diffraction	
11.00 - 12.00	Hands-on experiments PART 2: Light spectrum – Polarization	
12.00 - 13.00	Hands-on experiments PART 3: Light signals – colours – lenses	
13.00 - 14.00	Lunch	
14.00 - 15.00	Conclusion: round table, how the PhD students will implement action plan related to the	
	photonic explorer	
15.30	Departure for the Hotel	



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 64178.



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MONDAY 17 OCTOBER (for all the ESRs)

18.00 - 18.30 | Hotel Check In

- 18.30 20.00 | School Registration
- 20.00 22.00 | Dinner

TUESDAY 18 OCTOBER

08.00 – 08.50 | Breakfast

08.50 - 9.00 | D. CHARALAMBIDIS/G. SANSONE | Welcome

Session 1 -morning: Chairman A. Kuleff

09.00 - 10.00 | M. IVANOV | Molecules in intense laser fields

10.00 - 11.00 | A. MAQUET | Attosecond time delays

11.00 – 11.30 | Coffee Break

- 11.30 12.30 | T. PFEIFER | Laser control of absorption profiles on the attosecond timescale
- 12.30 15.30 | Lunch

Session 2 -afternoon: Chairman E. Cormier

- 15.30 16.30 | F. LEPINE | Application of attosecond pulses for the investigation of molecular dynamics
- 16.30 17.30 | H.J. WÖRNER | Attosecond charge migration
- 17.30 20.00 | Poster Session
- 20.00 22.00 | Dinner

WEDNESDAY 19 OCTOBER

08.00 - 09.00 | Breakfast

Session 3 -morning: Chairman F. Lepine

09.00 - 10.00 | J. LIMPERT | High-repetition rate fiber lasers

- 10.00 11.00 | T. METZGER | OPA driven by thin disk-lasers
- 11.00 11.30 | Coffee Break
- 11.30 12.30 | G. TSAKIRIS | Surface Harmonic Generation
- 12.30 15.30 | Lunch

Session 4 -afternoon: Chairman T. Metzger

- 15.30 16.30 | A. KULEFF | Ultrafast charge migration: fundamental theoretical aspects
- 16.30 17.00 | Coffee Break
- 17.00 18.00 | K. SCHAFER | Theoretical description of attosecond processes
- 20.00 22.00 | Social Dinner

THURSDAY 20 OCTOBER

08.00 – 09.00 | Breakfast

Session 5 -morning: Chairman J. Biegert

09.00 – 10.00 | L. GIANNESSI | Free Electron Lasers in the extreme ultraviolet and X-ray spectral regions

- 10.00 11.00 | N. BERRAH | Time-Resolved Molecular Dynamics using the LCLS
- 11.00 11.30 | Coffee Break

11.30 – 12.30 | P. LAMBROPOULOS | Photoionization under intense XUV fields: the perturbative approach 12.30 – 15.30 | Lunch

Session 6 -afternoon: Chairman N. Berrah

15.30 – 16.30 | F. MARTIN | Theoretical description of attosecond molecular dynamics

16.30 – 17.30 | R. DÖRNER | Ultrafast Dynamic investigated by recoil-ion and electron momentum spectroscopy

17.30 - 20.00 | Poster Session

20.00 – 22.00 | Dinner

FRIDAY 21 OCTOBER

08.00 - 09.00 | Breakfast

Session 7 -morning: Chairman L. Giannessi

09.00 – 10.00 | J. TISCH | Generation and application of multi-colour attosecond pulses

10.00 – 11.00 | E. CORMIER | Mid-IR laser sources

11.00 – 11.30 | Coffee Break

11.30 – 12.30 | P. TZALLAS | Nonlinear effects in the attosecond domain

12.30 – 15.30 | Lunch

Session 8 -morning: Chairman M. Ivanov

15.30 – 16.30 | S. KAHALY | Ultrafast charge dynamics at ultra-high intensity

16.30 – 17.00 | Coffee Break

17.00 – 18.00 | J. BIEGERT | Soft X-ray generation and Laser-induced Electron Diffraction

20.00 – 22.00 | Dinner

SATURDAY 22 OCTOBER

08.00 - 10.00 | Breakfast

10.00 – Departure

Invited Speakers

T. DE PAUW - EYEST

- A. KULEFF Theoretische Chemie
- P. LAMBROPOULOS FORTH, Crete Greece
- K. SCHAFER Louisiana State University, Baton Rouge USA
- A. MAQUET Universit'e Pierre et Marie Curie, Paris, France
- M. IVANOV Max Born Institut Berlin, Germany
- F. MARTIN Universidad Autonoma Madrid
- L. GIANNESSI Sincrotrone ELETTRA Trieste, Italy
- N. BERRAH University of Connecticut, USA
- R. DÖRNER University Frankfurt, Germany
- P. TZALLAS FORTH, Crete Greece
- G. TSAKIRIS Max Planck Institut for quantum Optics, Garching , Germany
- E. CORMIER University of Bordeaux, France- ELI-ALPS Szeged, Hungary
- J. BIEGERT ICFO, Barcellona Spain
- J. LIMPERT University of Jena, Germany
- T. METZGER TRUMPF Scientific Lasers Unterföhring, Germany
- S. KAHALY ELI-ALPS, Hungary
- H.J. WÖRNER ETH, Zurich Switzerland
- T. PFEIFER Max Planck Institut for nuclear physics
- J. TISCH Blackett Laboratory London UK
- F. LEPINE University of Lyon, France- ELI-ALPS Szeged, Hungary



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TUESDAY 18 OCTOBER

17.30 – 20.00 Poster Session			
P 01	Alexandridi Christina-Anastasia	Photoionization dynamics with attosecond resolution.	
P 02	Martin Gebhardt	Performance scaling of ultrafast Tm-based fiber lasers.	
P 03	Arne Baumann	Ultrafast VUV-photodissociation of H2O traced by single- shot autocorrelation.	
P 04	Arne Baumann	Ultrafast photodissociation dynamics of molecular oxygen in the vacuum ultraviolet studied with a single-color pump-probe scheme.	
P 05	Joana Duarte	Digital In-line holography corrected from aberrations by resorting to wavefront measurements.	
P 06	Maïté Louisy	Gating attosecond pulses in a noncollinear geometry.	
P 07	Alix Volte	Characterization of non-linear phases and spatio- temporal couplings in chirped-pulse amplificators by the d-scan technique.	
P 08	Jojart Peter	Phase noise measurement of water-cooled optomechanic components for high average power lasers.	
P 09	David Busto	Intensity dependence of Fano resonances in Helium and Argon.	
P 10	James D. Pickering	Ultrafast Dynamics in a Superfluid Solvent.	
P 11	Harshitha N.G.	Saddle point approaches in attosecond physics.	
P 12	Andrés Ordóñez	Chiral states in atomic hydrogen.	
P 13	Dionysios Potamianos	Attosecond Molecular Dynamics in Molecular Systems.	
P 14	Sylvain Maclot	Intense XUV attosecond physics at the Lund Laser Centre.	
P 15	Zsolt Gellert Kiss	Numerical investigations beyond the SFA model.	

THURSDAY 20 OCTOBER

17.30	- 20.00 Poster Session	
P 01	Katharina Wenig	Chirped electron wave packets resolved with terahertz- field driven streak camera.
P 02	Sudipta Mondal	Coherent ultrashort bursts of XUV and THz pulses via the interaction of high intensity short pulse laser with plasma mirrors.
P 03	Anna Golinelli	High repetition rate, sub-20fs, CEP stable Ti:Sa front-end for attosecond pulse generation.
P 04	Céline Chappuis	Generation of High-Order Harmonics carrying Orbital Angular Momentum.
P 05	Marc Rebholz	XUV-pump—XUV-probe transient absorption experiments at FLASH.
P 06	Arjun Nayak Puttur	ELI-ALPS end-stations for gas phase and condensed matter physics of ultrafast phenomena.
P 07	Veit Stooß	Comparison of time-dependent strong-field effects in atoms and molecules observed by attosecond XUV absorption spectroscopy.
P 08	Mikayel Musheghyan	Ultrabroadband (FWHM > 100 nm) Ti:Sapphire Multipass Amplifier.
P 09	Lana Neoričić	High intensity attosecond beamlines at ELI-ALPS based on gas high harmonic generation.
P 10	Lorenz Drescher	XUV Transient Absorption Spectroscopy of lodomethane and lodobenzene.
P 11	Peter Badanko	Molecular vibrational trapping revisited: a case study with D2+.
P 12	Melby Johny	Photophysics and electron dynamics of Indole and Indole- Water.
P 13	Attila Toth	Dissociative ionization of D2+ in strong laser fields.
P 14	Neven Ibrakovic	Achromatic Dual-Waveplates.
P 15	Guillaume Bouchard	Mechanisms induced by Extrem Light Intensities: Sub- femtoseconds Sources, Analysed Numerically, Driven by Relativistic Electrons (MELI:SSANDRE).

