

Preliminary Program of the XTRA Summer School
Ultra-short XUV pulses for time-resolved and non linear applications
 24th-29th May 2005, Porquerolles Island

Tuesday 24 th		
18h00-19h00	Arrival	
19h00-20h00	Dinner	
Wednesday 25 th		
	Lectures and practical schools (titles to be confirmed)	Lecturer
8h45-9h00	Welcome / presentation of the Summer School I. Femtosecond laser pulses	
9h00-10h00	I.1 Production of high power femtosecond laser pulses	U. Keller Institute for Quantum Electronics , ETH Zürich, Switzerland
10h00-10h15	Coffee break	
10h15-11h00	I.2 Production of few-cycles laser pulses	M. Nisoli CUSBO, Politecnico di Milano, Milano, Italy
11h00-11h45	I.3 Phase control in few-cycles laser pulses	A. Baltuska Max-Planck-Institut für Quantenoptik, Garching, Germany
12h00-13h00	Lunch	
13h-15h30	Free time	
15h30-16h30	I.4 XUV optics and instrumentation	M. Wieland Institute for X-ray Optics, RheinAhrCampus Remagen, Germany
16h30-17h30	I.5 Characterization and control of ultra-short laser pulses	M. Joffre Laboratoire Optique et Biologie, Ecole Polytechnique, Palaiseau, France
17h30-17h45	Coffee break	
17h45-18h45	Practical and numerical schools 1 (two schools in parallel) <i>Temporal shaping of laser pulses (1st of 2)</i> <i>Computing laser propagation (1)</i>	A. Monmayrant Lab. Collisions, Agrégats, Réactivité, Univ. Paul Sabatier, Toulouse, France T. Auguste Service des Photons, Atomes et Molécules, CEA-Saclay, France
19h00-20h00	Dinner	

Thursday 26 th	Lectures and practical schools	Lecturer
	II. High field physics - High harmonics generation in gases	
9h00-10h00	II.1 Electron dynamics in high field	M. Lewenstein Institut für theoretische Physik, Hannover, Germany
10h00-10h45	II.2 Attosecond dynamics in HHG	K. Varju Lund Laser Center, LTH Lund, Sweden
10h15-10h30	Coffee break	
10h30-11h15	II.3 HHG in gas : macroscopic / experimental aspects	A. L'Huillier Lund Laser Center, LTH Lund, Sweden
11h15-12h00	II.4 Optimizing XUV output in HHG	S. Kazamias Lab. Interaction des X Avec la Matière, Univ. Paris XI-Orsay, France
12h00 -13h00	Lunch	
13h00-16h00	Free time	
16h00-16h45	II.5 Characterization and control of XUV pulses	E. Cormier Centre d'Etudes des Lasers Intenses et Applications, Univ. Bordeaux 1, France
16h45-17h00	Coffee break	
17h00-18h00	Practical and numerical schools 2 (two schools in parallel) <i>Temporal shaping of laser pulses (2)</i> <i>Computing laser propagation (2)</i>	A. Monmayrant Lab. Collisions, Agrégats, Réactivité, Univ. Paul Sabatier, Toulouse, France T. Auguste Service des Photons, Atomes et Molécules, CEA-Saclay, France
18h00-19h00	Practical and numerical schools 3 (two schools in parallel) <i>XUV pulse characterization : RABITT (1)</i> <i>XUV pulse characterization : SPIDER, FROG-CRAB (1)</i>	P. Johnsson Lund Laser Center, LTH Lund, Sweden Y. Mairesse Service des Photons, Atomes et Molécules, CEA-Saclay, France
19h00-20h00	Dinner	
20h30-22h00	Poster session 1	

Friday 27 th	Lectures and practical schools	Lecturer
	III Applications of ultra-short coherent XUV (1)	
8h30-9h15	III.1 XUV applications to atomic physics	D. Charalambidis IESL-FORTH, Heraklion, Crete, Greece
9h15-10h00	III.2 Applications of the coherence properties to spectroscopy	M. Bellini Istituto Nazionale di Ottica Applicata c/o LENS, Firenze, Italy
10h00-10h15	Coffee break	
10h15-11h00	III.3 Molecular dynamics in high field	D. Villeneuve Steacie Institute for Molecular Sciences, Ottawa, Canada
11h00-11h45	III.4 XUV applications in molecular dynamics	M. Vrakking FOM Institute for Atomic and Molecular Physics, Amsterdam, The Netherlands
12h00 -13h00	Lunch	
13h00-16h00	Free time	
16h00-16h45	III.5 XUV applications in solid state physics	P. Siffalovic Institute of Physics / Slovak Academy of Sciences, Bratislava, Slovakia
16h45-17h00	Coffee break	
17h00-18h00	Practical and numerical schools 3 (two schools in parallel) <i>XUV pulse characterization : RABITT (2)</i> <i>XUV pulse characterization : SPIDER, FROG-CRAB (2)</i>	P. Johnsson Lund Laser Center, LTH Lund, Sweden Y. Mairesse Service des Photons, Atomes et Molécules, CEA-Saclay, France
18h00-19h00	Poster session 2	
20h00-22h00	Summer School Dinner	

Saturday 28 th	Lectures and practical schools	Lecturer
	III Applications of ultra-short coherent XUV (2)	
8h30-9h15	III.6 XUV applications in surface physics	Q. Guo Nanoscale Phys. Res. Lab., The University of Birmingham, UK
9h15-10h00	III.7 XUV applications in clusters	T. Laarmann Max Born Institute, Berlin, Germany
10h00-10h15	Coffee break	
	IV Other coherent XUV sources	
10h15-11h15	IV.1 HHG on surfaces	D. von der Linde Institut für Laser-und Plasmaphysik, Univ. Duisburg-Essen, Germany
11h15-12h00	IV.2 Seeding of LINAC-FEL by an external source	L. Giannessi ENEA, Frascati, Italy
12h00-13h00	Lunch	
13h00-15h30	Free time	
	XTRA business meeting	
15h30-16h30	Practical and numerical schools 4 <i>Seeding of LINAC-FEL by laser harmonics (1)</i>	L. Giannessi ENEA, Frascati, Italy
16h30-16h45	Coffee break	
16h45-17h45	IV.3 The X-ray laser	Ph. Zeitoun Lab. d'Optique Appliquée, ENSTA-Ecole Polytechnique, Palaiseau, France
17h45-19h00	Free time	
19h00-20h00	Dinner	
Sunday 29 th		
8h00-12h00	Departure	