

# Laserlab User Meeting, Marseille, France, 26-27 September 2013

## Using laser sources and secondary sources as diagnostic tools for science

Status: 4 September 2013

Thursday 26 September		
9h00 - 9h20	Welcome	
<b>Session 1 - Session Chair: Marta Castillejo</b>		
9h20 - 9h50	J. Tisch (invited)	"The generation and application of few-cycle and attosecond light pulses"
9h50 - 10h10	S. Driever	Tunable 1.6-2 $\mu\text{m}$ Near Infrared Few-Cycle Pulse Generation by Filamentation (CELIA)
10h10 - 10h30	S. Ter-Avetisyan	Laser accelerated energetic beams of negative ions and neutral atoms (MBI)
10h30 - 11h00	<b>Coffee Break</b>	
<b>Session 2 - Session Chair: Oldrich Renner</b>		
11h00 - 11h20	L. Lancia	Plasma based laser amplification through Brillouin backscattering (LULI)
11h20 - 11h40	A. Dreischuh	Optical vortices as singular markers in cascaded four-wave frequency mixing process (HIJ-FSU)
11h40 - 12h00	L. Volpe	Absolute reflectivity measurement of spherically bent crystals (CELIA)
12h00 - 12h20	G. Williams	Multiwavelength XUV holography (LOA)
12h20 - 14h	<b>Lunch at MESS</b>	
<b>Session 3 - Session Chair: Rosa Weigand</b>		
14h - 14h30	K. Sokolowski-Tinten (invited)	"Ultrafast processes in laser-excited solids probed by ultrashort X-ray pulses"
14h30 - 14h50	E. Da Como	Broadband ultrafast spectroscopy of organic materials for photovoltaics (CUSBO)
14h50 - 15h10	E. Horvath	Ultrafast spectroscopy on light energy converting nanocomposite materials (USZ)
15h10 - 15h30	P. Balling	Short-pulse laser excitation of dielectric materials: Experiments and modelling (SLIC)
15h30 - 15h50	A. Zair	Dynamical interference signature via High Harmonic Spectroscopy revealing multi-ionisation channel contributions (SLIC)
15h50 - 16h10	F. Lepine	Probing time-dependent decay of multi-electronic super-excited states in PAH molecules (MBI)
16h10 - 16h30	<b>Coffee Break</b>	
16h30 - 20 h	<i>Visit of LP3 laboratory on Campus de Luminy with the possibility for a walk in the Callanques (bus transportation) or visit of MuCEM Museum</i>	
20h	<b>Dinner at Arcenaulx restaurant</b>	

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<b>Friday 27 September</b>		
<b>Session 4 - Session Chair: Jouko Korppi-Tommola</b>		
9h00 - 9h20	M. Marrocco	Issues on the route to accurate thermometry based on high-resolution vibrational coherent anti-Stokes Raman spectra (LLC)
9h20 - 9h40	M. Lopez-Lopez	Detecting explosives through non-transparent materials using time-resolved Raman spectroscopy; a forensic access project at LaserLaB Amsterdam
9h40 - 10h00	E. Axente	Laser-induced breakdown spectroscopy applied to surface investigation of combinatorial library thin films (LP3)
10h00 - 10h20	M. Modreanu	Investigation of bulk defects in amorphous and polycrystalline HfO <sub>2</sub> thin films (FORTH-IESL)
10h20 - 10h40	Marton/Kisapati	Laser-cleaning of excavated fresco samples and DHSPI testing of model fresco samples for differentiating the photomechanical effects induced by the laser cleaning (FORTH-IESL)
10h40 - 11 h	<b>Coffee Break</b>	
11h00 - 11h20	R. Eason	Shadowgraph imaging in femtosecond laser-induced forward transfer of functional materials (LP3)
11h20 - 12h20	Round table discussion between users, Access Board members and lab directors. Chairs: Rosa Weigand, Jouko Korppi-Tommola, Sylvie Jacquemot, Didier Normand	
12h20 - 14h	<b>Lunch at UNM restaurant</b>	
<b>Session 5 - Session Chair: Istvan Földes</b>		
14h00 - 14h20	R. Laasner	Excitonic absorption saturation with femtosecond UV laser pulses (VULRC)
14h20 - 14h40	G. Tallents	Probing energy transport with EUV lasers (LASERIX)
14h40 - 15h	T. Balciunas	Direct carrier-envelope phase control of an amplified laser system (VULRC)
15h - 15h20	A. Green	Ultra-fast pulsed neutron sources driven by high intensity laser pulses (LULI)
15h20 - 15h40	A. Klisnick/A. Le Marec	Spectral and coherence properties of the PALS X-ray laser (PALS)
15h40 - 16h	<b>Coffee Break</b>	
<b>Session 6 - Session Chair: Marc Sentis</b>		
16h - 16h20	U. Chaulagain	An experiment to study Radiative Shocks relevant to astrophysics at PALS Facility (PALS)
16h20 - 16h40	T. Chodukowski	Investigation of energy transfer from iodine laser shock wave generated in solid target relevant to shock ignition (PALS)
16h40 - 17h	D. Denis-Petit	Nucleus-electronic cloud coupling in plasma: the case of <sup>84</sup> Rb (GSI PHELIX)
17h - 17h20	A. Puszka	Diffuse Optical Tomography with fast-gated SPADs (CUSBO)
17h20 - 17h40	F. Rosmej	Characterization of hot electrons in dense plasmas by high-resolution X-ray imaging near 8 keV (PALS)
17h40 - 18h00	E. Kroupp	High resolution x-ray spectroscopy of laser-produced solid-density plasmas (HIJ-FSU)