

# Time-resolved X-Ray Imaging

A Laserlab Foresight Workshop

21-22 May 2012, Capsis Elite Resort, Crete, Greece

## Monday 21. May 2012

9:15 - 9:30 Introductory Comments / Welcome (Jens Biegert and Stelios Tzortzakis)

### X-Rays and Methods

Discussion Leader: **Philippe Zeitoun** (LOA Palaiseau, France)

9:30 - 10:00 **Philippe Zeitoun** (LOA Palaiseau, France)

"XUV to X-Rays – possibilities and limitations of ultrafast sources for biological imaging"

10:00 - 10:30 **Jesse Clark** (Univ. College London, UK)

"Bragg Coherent X-ray Diffraction"

10:30 - 10:45 Discussion

10:45 - 11:15 Coffee break

### Bio Imaging

Discussion Leader: **Marta Fajardo** (Instituto de Plasmas e Fusão Nuclear)

11:15 - 11:45 **Marta Fajardo** (Instituto de Plasmas e Fusão Nuclear, Portugal)

"Bright X-rays for fast biology"

11:45 - 12:15 **Tomas Barends** (MPI Heidelberg, Germany)

"Bio imaging in situ with FEL"

12:15 - 12:30 Discussion

13:00 - 15:00 Lunch

### Diffraction Imaging

Discussion Leader: **Gergely Katona** (University of Gotenburg, Sweden)

15:00 - 15:30 **Gergely Katona** (University of Gotenburg, Sweden)

"Serial femtosecond crystallography"

15:30 - 16:00 **Peter Samartzis** (FORTH, Greece)

"Probing structure with Ultrafast Electron Diffraction"

16:00 - 16:15 Discussion

16:15 - 16:45 Coffee break

16:45 - 18:00 Posters and discussion

20:00 Dinner

**Tuesday 22. May 2012**

**HHG sources and methods**

Discussion Leader: **Dao Van Lap** (Swinburne University of Technology)

09:00 - 09:30

**Dao Van Lap** (Swinburne University of Technology, Australia)

"Coherent X-ray diffraction with High order harmonic radiation"

09:30 - 10:00

**Ming-Chang Chen** (JILA Colorado, USA)

"Bright Coherent Ultrahigh Harmonics in the keV X-Ray Regime from Mid-Infrared Femtosecond Lasers"

10:00 - 10:30

**Janos Hebling** (Uni Pecs, Hungary)

"THz-Based UV – X-Ray Sources"

10:30 - 10:45

Discussion

10:45 - 11:15

Coffee break

**X-Rays, FEL and Novel approaches**

Discussion Leader: **Thomas Tschentscher** (European XFEL GmbH)

11:15 - 11:45

**Thomas Tschentscher** (European XFEL GmbH, Germany)

"Time-resolved structural biology at European XFEL"

11:45 - 12:15

**Andreas Meier** (Uni München/CFEL, Germany)

"Mini FEL and seeing"

12:15 - 12:45

Discussion and concluding remarks

13:00

Lunch