

# Program of the 10<sup>th</sup> Direct Drive and Fast Ignition Workshop

Prague, May 27 – 30, 2012

## Sunday May, 27

19:30 Registration

20:00 – 21: 30 **Welcome reception**

## Monday, May 28

08:00 Registration

08:30 Opening

08:40 **Joachain** – ESF research networking programme “SILMI” (Super-intense laser-matter interactions)

08:50 *Short break*

*Chair: V Tikhonchuk*

09:00 **Evans** - Collisional PIC Simulations at Ultra-high Intensity (including tutorial overview on hot electron generation)

10:00 **Fedosejevs** - Fast electron generation and transport for fast ignition at 527nm

10:30 *Coffee break*

*Chair: A. Andreev*

11:00 **Ramakrishna** - Electron beam transport and collimation in structured targets

11:30 **Temporal** - Study of the ignition conditions of polarized DT for ICF

12:00 **Cornet** - A hybrid PIC-MHD model for high density laser plasma simulations

12:30 *Lunch break*

*Chair: M. Murakami*

14:00 **Schlegel** - Fast Ignition with Ponderomotively Accelerated Ions (including tutorial overview on ion fast ignition)

15:00 **Kawata** - Multi-stage laser ion acceleration

15:30 **Andreev** - Fast ions generation from nanostructure target irradiated by high intensity short laser pulse

16:00 *Coffee break*

*Chair: B. Canaud*

16:30 **Ter-Avetissyan** - Energetic neutral and negative ion beams accelerated from spray target irradiated with ultra-short intense laser pulses

17:00 **Korn** - Research and technology development with ultra-intense lasers at ELI-Beamlines-Prague

17: 30 **Panel discussion**

## Tuesday, May 29

*Chair: R. Evans*

08:30 **Ribeyre** - Shock ignition and converging shock evolution (including tutorial overview on shock ignition)

09:30 **Canaud** - Towards Direct-Drive Shock-Ignition on the Laser Megajoule

10:00 **Brandon** – 1D baseline target design for direct drive shock ignition

10:30 *Coffee break*

*Chair: S. Gus'kov*

11:00 **Murakami** - High compression of matter by hyper-spherical shockwaves and its implication to ICF

11:30 **Davie** - Perturbed Reflected Shocks relating to the Shock Ignition IFE Scheme

12:00 **Levy** – Self-Generated Magnetic Fields and Rayleigh-Taylor Instability

12:30 *Lunch break*

*Chair: S. Kawata*

14:00 **Tikhonchuk** – Laser interactions with long corona relevant to SI (including tutorial overview)

15:00 **Klimo** - Modeling laser plasma interaction in shock ignition

15:30 **Mašek** - Vlasov-Fokker-Planck simulations of electron gas in long scale length laser plasmas

16:00 *Coffee break*

*Chair: J. Badziak*

16:30 **Limpouch** - Foams in direct-drive fusion: Laser-supported ionization wave in gases and foams

17:00 **Gus'kov** - Non-cryogenic fast- and shock-ignited ICF targets

17:30 **Panel discussion**

19:45 **Workshop dinner** (*Restaurant Petřínské terasy – please, see additional instructions*)

## Wednesday, May 30

*Chair: T. Schlegel*

08:30 **Pšikal** – Proton acceleration in thin foils with micro-structured surface

09:00 **Elkina** - Multi-scale modeling of laser-plasma interaction at ultra-high intensity

09:30 **Badziak** - Efficient acceleration of ion beams and macroparticles for fast ignition in the LICPA accelerator

10:00 **Liska** - Hydrodynamics simulation of interpenetrating laser generated plasma plumes

10:30 *Coffee break*

*Chair: X. Ribeyre*

11:00 **Laffite** - Symmetry in a 48 beams Direct Drive configuration

11:30 **Drška** - Laser-driven Positron and Meson Generation

12:00 **Panel discussion**

12:30 *Lunch break*

14:00 Optional – **Excursion to PALS laboratory or Discussion at IoP AS CR**