

**ELI Beamlines, INRS and LOA joint workshop on:
Laser-driven Femtosecond X-ray sources and their applications
(LFXA workshop)**

ELI Beamlines, Dolni Brezany, Czech Republic
Friday, 12th October 2018

Session 1 – Source development/diagnostics and Theory

- 13:00-13:25 **U. Chaulagain** / LWFA-driven X-ray sources at ELI Beamlines
- 13:25-13:50 **J.C. Kieffer** / Generation of Intense LWFA-based hard X-ray beams (40keV)
in the ultra-relativistic self-guiding regime
- 13:50-14:15 **Z. Najmudin** / LWFA-based X-ray sources and their applications
- 14:15-14:40 **Y. Li** / High energy x-ray generated from wakefield-accelerated electrons
wiggling in a laser field
- 14:40-15:05 **A. Pirozkov** / Brust Intensification by Singularity Emitting Radiation as
coherent x-ray source
- 15:05-15:35 **Coffee Break**

Session 2 – Applications of LWFA-based X-ray sources

- 15:35-16:00 **A. Doepp** / Laser-driven X-ray sources in Garching and their applications
- 16:00-16:25 **L. Lecherbourg** / Warm Dense Matter X-ray absorption spectroscopy with
laser-produced betatron source
- 16:25-16:50 **J. Wood** / Time Resolved Imaging of Shock Compressed Matter Using X-Rays
from a Laser Wakefield Accelerator
- 16:50-17:15 **C. Brenner** / Laser-driven sources for innovation in non-destructive
inspection
- 17:15-17:40 **D. Stutman** / Biomedical X-ray Phase Contrast Imaging at ELI-NP
- 17:40-18:15 **Roundtable discussion**

Roundtable discussion on potential applications of LWFA driven sources and identifications of short and long-term goals.

18:30 Transfer to Prague

19:30 Workshop Dinner at Kolkovna Olympia Restaurant

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