Workshop

Laser particle accelerators, their applications, and possibilities of experiments in the ELI infrastructure

Place: Sauletekio al. 3, NFTMC, A101
Date: 2023 / 03 / 23
Registration: http://bit.ly/3ZwtojO

Program

9.00 ELI ERIC infrastructure for frontier research
Andrew Harrison, ELI ERIC Science director, Dolní Břežany, Czech Republic

9.30 **High-repetition rate laser-plasma acceleration**
Jerome Faure, Laboratoire d'Optique Appliquée, ENSTA/ Ecole Polytechnique/ CNRS, Palaiseau, France

10.00 **Recent progress and new developments in nuclear astrophysics**
Konrad Schmidt, Division of Nuclear Physics, Institute of Radiation Physics, Helmholtz-Zentrum Dresden - Rossendorf (HZDR)

10.30 **Recent progress and new developments in nuclear astrophysics**
Gabriele Maria Grittani, ELI Beamlines

11.00 **Coffee break**

11.30 **Radiobiology and clinical research using laser-driven ion beams at ELI Beamlines**
GA Pablo Cirrone , INFN, Italy & ELI Beamlines, Czech Republic

12.00 **Novel approaches in radiation oncology with a particular interest in laser-based technologies**
Katalin Hideghéty, President of the Hungarian Society of Clinical Oncology, professor at the Oncology Clinic of the University of Szeged, head of the Radiation Therapy Department, group leader of Biomedical Application Group at ELI ALPS

12.30 **ELI ERIC Call for users 2**
Andrew Harrison, ELI ERIC Science director, Dolní Břežany, Czech Republic

13.00 **Nozzle design for gas targets**
Vidmantas Tomkus, Department of Laser Technologies, FTMC

13.10 **Laser processing of nozzles for gas targets**
Miglė Mackevičiūtė, Department of Laser Technologies, FTMC

13.20 **FBPIC simulations of laser wakefield acceleration**
Mahdi Abedi-Varaki, Department of Laser Technologies, FTMC

13.30 Dosimetry Methods in Radiosurgery
Diana Adlienė , Department of Physics, Kaunas University of Technology

13.45 Discussion

14.00 **Lunch**