



2023 Accelerator School at E. Majorana CENTER - Erice (Sicily)

Arrival in 27 of July and Departure 2 of August

Novel acceleration schemes and enabling technologies;

*Muon Collider, Plasma acceleration,
ERL and dielectrics*

The schools will start with a recap of the basic principle of particle accelerators and will review the limit of the present technologies on which are based existing or near-future accelerators. The saturation in gaining energy of the last two decades clearly show the necessity of pursuing novel acceleration schemes and new technologies enabling to go beyond the present limits of accelerators. The topic of this course is to examine some of the more promising schemes: rather than focusing on single type of accelerator the school will discuss basic concepts and layout for acceleration of muons and of plasma-based accelerators. Other schemes, like acceleration based on dielectrics and Energy Recirculating Linacs (ERL) will be also presented and discussed.

Applications should be submitted via the website

<https://agenda.infn.it/event/35286/>

Fee: 1000 Euro (it includes full board)

You will need to be prepared to upload your short CV. Response will be sent via e-mail. The number of place is being limited. Acceptation will be done mainly according to first come-first served base. For questions not covered on the websites, please contact: Ms Tiina Benson – Tiina.Benson@mi.infn.it

Directors of the Course:

Professor Frank Tecker - CERN, Professor Lucio Rossi - University of Milan & INFN – LASA,

Professor Ralph Assmann - DESY & INFN-LNF

Speakers:

Antoine Chance - CEA-IRFU

Christopher Rogers - STFC

Claude Marchand - CEA-IRFU

David Alesini - INFN-LNF

Eduard Prat - PSI

Enrica Chiadroni - Univ. La Sapienza Roma

Frank Zimmermann - CERN

Giuseppe Lerner - CERN

Giuseppe Torrioni - INFN-LNS

Laura Monaco - INFN

Leo Gizzi - INO - CNR

Luca Bottura - CERN

Lucio Rossi - Univ. of Milan & INFN-Mi-LASA

Mark Hogan - SLAC

Michaela Arnold - Technical Univ. Darmstadt

Oliver Bruning - CERN

Pablo Cirrone - INFN-LNS

Peter Hommelhoff - University of Erlangen

Ralph Assmann - DESY & INFN-LNF

Samuele Mariotto - Univ. of Milan – INFN- LASA

Tatiana Pieloni - EPFL

Viktor Malka - Weizmann Institut