



The Abdus Salam
International Centre
for Theoretical Physics



School of Hadron Radiotherapy

Description:

The course provides specialized education and training on development and implementation of hadron, including heavy ions, radiotherapy and accelerator technology. It is designed for medical physicists in clinical roles with ambition to learn about newest technological developments in radiotherapy.

MORE DETAILS:

This course equips medical physicists with advanced skills in hadron radiotherapy and accelerator technology. Focusing on both practical and theoretical aspects, it covers several important topics. These include the physics of particle accelerators, offering a comprehensive understanding of the advanced technologies driving this field, radiobiology for particle therapy, providing insights into the biological effects of ionizing radiation crucial for effective and safe treatments.

Participants will learn about dosimetry, dose calculation algorithms, radiation protection in ion radiotherapy facilities and engage in hands-on treatment planning exercises using RayStation TPS. This course is a gateway to mastering the latest technological advancements in radiotherapy, equipping medical physicists with the knowledge and skills to excel in the evolving landscape of cancer treatment.

TOPICS:

- Physics of Particle Accelerators
- Radiobiology for Particle Therapy
- Dosimetry and Dose Computation of Particle Beams
- Radiation Protection for Ion Radiotherapy Facilities
- Hands-on Exercises: Treatment Planning with RayStation TPS

SPEAKERS:

G. DEDES, Munich University, Germany (remote)
M. DURANTE, GSI, Germany
M. FERRARINI, CNAO, Italy
G. GEORGEV, University of Sofia, Bulgaria
A. J. LOMAX, PSI, Switzerland
S. LORENTINI, Azienda Provinciale per i Servizi Sanitari, Trento, Italy
S. ROSSI, HITRIplus
M. VRETENAR, CERN, Switzerland



8 - 12 April 2024



Trieste, Italy



**Deadline:
29 January 2024**

DIRECTORS:

S. GALIĆ, University of Mostar, Bosnia and Herzegovina
P. GRÜBLING, SEEIIST Association, Switzerland

LOCAL ORGANISER:

M. ESPOSITO, ICTP, Italy

GRANTS:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

FURTHER INFORMATION:



E-mail: smr3927@ictp.it

Web: <https://indico.ictp.it/event/10465/>

Female scientists are encouraged to apply.

