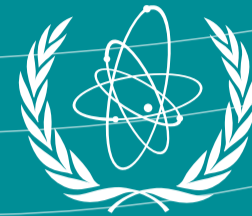


Joint ICTP-IAEA Workshop on Monte Carlo Radiation Transport and Associated Data Needs for Medical Applications: EGSnrc



IAEA

18 - 29 September 2017
Trieste, Italy

Further information:

Activity URL: <http://indico.ictp.it/event/7992/>

E-mail: smr3148@ictp.it

This is a hands-on course about the EGSnrc and BEAMnrc Monte Carlo codes for simulating electron-photon transport, with emphasis on medical physics applications. EGSnrc is considered the gold standard for such simulations. The lecturers are the code's developers/maintainers.

Directors:

R. CAPOTE NOY, IAEA, Austria

D.W.O. ROGERS, Carleton University, Canada

Local Organizer:

L. Bertocchi, ICTP, Italy

Description:

Monte Carlo (MC) techniques have been used very extensively in medical physics applications, and offer the most powerful tool for modelling radiation transport in different media. The availability of general purpose MC codes (e.g. EGSnrc, Penelope and Geant4) combined with the ever-increasing computer speed and decreasing costs led to a boom in MC studies in recent years. MC techniques will dominate the field of radiation dosimetry and benchmark dose calculations in radiotherapy for many years to come. The Workshop constitutes a unique opportunity for scientists, engineers and medical physicists to gain extensive and up-to-date training on the use and understanding of Monte Carlo methods of relevance to medical applications in therapy and diagnostics, in particular in the use of the state-of-the-art BEAMnrc/EGSnrc Monte Carlo code. Also, participants will be introduced to the on-line data retrieval for medical applications.

Topics:

- Monte Carlo transport of photons and electrons in matter
- EGSnrc
- BEAMnrc
- On-line retrieval of nuclear data for medical applications

Workshop Speakers:

E. Mainegra-Hing, Canada

D.W.O. Rogers, Canada

F. Tessier, Canada

R. Townson, Canada

B. Walters, Canada

I. Kawrakow, Italy

How to apply:

Online application:
<http://indico.ictp.it/event/7992/>

Female scientists are encouraged to apply.

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.

Deadline:

31 May 2017



The Abdus Salam
International Centre
for Theoretical Physics

www.ictp.it

Strada Costiera 11, 34151 Trieste, Italy Tel. +39 0402240111

