





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

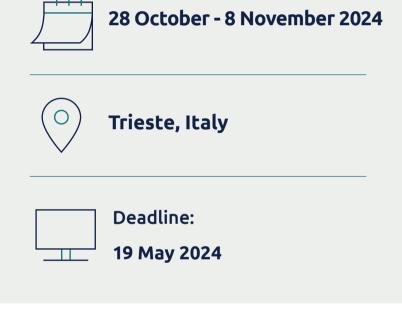
# **Description:**

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.

### **MORE DETAILS:**

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.





## **DIRECTORS:**

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### LOCAL ORGANIZER:

M. ESPOSITO, ICTP, Italy

#### **SPEAKERS:**

I. Kawrakow, Bulgaria E. Mainegra-Hing, Canada P. Oliver, Canada D.W.O. Rogers, Canada F. Tessier, Canada R. Townson, Canada B. Walters, Canada

#### **PREREQUISITES:**

The workshop is intended for young graduate students with some experience in Monte Carlo computation.



#### FURTHER INFORMATION:



E-mail: smr3978@ictp.it

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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.

