

Joint ICTP-IAEA Advanced School on IAEA/AAPM Code of Practice for the Dosimetry of Small Static Photon Fields Used in External Beam Radiotherapy

12 - 16 April 2018
Trieste, Italy



IAEA

International Atomic Energy Agency

Further information:

<http://indico.ictp.it/event/8304/>
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Modern radiotherapy has substantially increased the use of small radiation fields like those used in various forms of SRT, SBRT, SRS and IMRT. These treatments are not only performed with specialized, dedicated machines, but also with conventional, non-dedicated accelerators equipped with high resolution multi-leaf collimators.

In radiotherapy, accurate doses are essential. Therefore, a key requirement in radiotherapy is consistent reference dosimetry and consistent procedures within a country. For conventional radiotherapy this has been achieved by internationally adopted codes of practice. However the standard codes of practice are based on the use of a 10 cm x 10 cm reference field that may not be achievable using some modern specialized machines.

A joint working group between the IAEA and AAPM has written a new small field code of practice. The aim of this course is to teach participants how to implement the new code of practice in the clinic.

Participation:

This workshop is for clinically qualified medical physicists from United Nations, UNESCO or IAEA member countries who should hold a university degree preferably in medical physics. The candidate should also have at least 3 years working experience in a hospital and must participate in small field clinical techniques. Participants should have an understanding of IAEA TRS-398, 'Absorbed dose determination in external beam radiotherapy'.

The workshop is an opportunity for medical physicists from Member States to get first-hand information on the dosimetry of small fields in radiotherapy. It will be beneficial to clinical medical physicists working in radiotherapy modalities using small fields such as Stereotactic Radiotherapy (SRT), Stereotactic Body Radiotherapy (SBRT) Stereotactic Radiosurgery (SRS) and Intensity Modulated Radiation Therapy (IMRT).

Topics:

- Physics and challenges of small field megavolt photon beams;
- description of the new IAEA/AAPM code of practice for the dosimetry of static small photon fields;
- discussion of small field detectors;
- absorbed dose to water standards for small fields;
- machine-specific reference dosimetry;
- output factors: definition, measurement and correction; and relative dose measurements in small fields.

How to apply:

Online application:
<http://indico.ictp.it/event/8304/>

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.

Director:

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Local Organizers:

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Lecturers:

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Deadline:

12 January 2018

