

# COLLEGE ON MEDICAL PHYSICS

## Medical Imaging Physics and Technology – Principles of Optimisation, Safety, and Education Development for Building Capacity in Developing Countries



**5 - 23 September 2022**  
**An ICTP Meeting**  
**Trieste, Italy**

Further information:  
<http://indico.ictp.it/event/9824/>  
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The physics of medical imaging is at the heart of contemporary medicine. Medical Imaging equipment is complex and its proper and safe function requires medical physicists trained in imaging procedures and applications. Building capacity in developing countries on this subject is essential for the complete delivery of healthcare in these countries. Due to the rapid evolution of medical imaging equipment, the need of medical physicists is constantly growing.

The College on Medical Physics will prepare the participants to be able to transfer their knowledge to their colleagues; participants will receive a free compilation of e-learning materials.

### Topics:

- X-ray Imaging
- Multi Detector Computed Tomography
- Digital mammography, fluoroscopy and others
- SPECT Tomography
- PET Tomography
- Hybrid Imaging systems
- Digital and other radiation detectors
- Magnetic Resonance Imaging

The College programme will cover these topics with emphasis on:

- Medical Image parameters
- Optimising Medical Imaging Procedure
- Evaluation and analysis of medical images
- Networks in medical imaging departments
- Medical imaging equipment: management and specification
- Medical imaging: dose management and radiation protection
- Interventional imaging

Additionally:

- Developing medical physics effective knowledge structures
- Capacity building principles
- Developing online e-learning activities

### Directors:

L. BERTOCCHI, ICTP, Italy  
P. BREGANT, Ospedale Maggiore Centro Tumori, Italy  
F. MILANO, University of Florence, Italy  
M.S. STOEVA, IUPESM, UK  
S. TABAKOV, King's College London and IUPESM, UK

### Local Organiser:

L. BERTOCCHI, ICTP, Italy

### Speakers:

L. BERTOCCHI, ICTP, Italy  
P. BREGANT, Ospedale Maggiore Centro Tumori, Italy  
F. MILANO, University of Florence, Italy  
J. OSHINSKI, Emory University, School of Medicine, USA  
R. PADOVANI, ICTP, Italy  
A. SEIBERT, UC Davis Health, CA, USA  
P. SPRAWLS, Emory University, School of Medicine, USA  
M.S. STOEVA, IUPESM, UK  
S. TABAKOV, King's College London and IUPESM, UK  
S.V. TIPNIS, Medical University of South Carolina, USA

### How to apply:

Online application:  
<http://indico.ictp.it/event/9824/>

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:

**5 May 2022**



The Abdus Salam  
**International Centre  
for Theoretical Physics**  
[www.ictp.it](http://www.ictp.it)  
Trieste, Italy

