



## ***Third School on Medical Physics***

Dear Colleagues:

The Organizing Committee of the XI Latin American Symposium on Nuclear Physics and Applications LASNPA 2017 *is pleased to invite you to the **Third School on Medical Physics***, which will be held in Havana, Cuba, from October 23 to 27, 2017.

The First School on Medical Physics was held in Montevideo in 2013 and the Second in Medellin, Colombia, in 2015. Those experiences have shown that regional events allow physicists, scientists and researchers from all the disciplines of Medical Physics to meet and exchange research ideas, promote multidisciplinary work and address the educational and professional development interests of our members. The School is orientated to postgraduate students in Physics or Medical Physics as well as medical physicists and researchers. The purpose of the school is the dissemination of major advances in medical physics. The school has a twofold purpose of both a school of short courses and a workshop.

Organizers: CEADEN, InSTEC, the Medical Physics Section of the Cuban Society of Physics .

Central topics of the event considering the most recent advances of the Medical Physics field.

### **Track 1: Radiotherapy Physics**

- 1.1. Transition from 3DCRT to IMRT
- 1.2. Image-Guided RT
- 1.3. RT Planning: Strategies (Biological/Physical Optimization, Motion Management, Remote Dose Planning)
- 1.4. Dosimetry of small and non-standard fields (SRS/IMRT)
- 1.5. Brachytherapy
- 1.6. Intraoperative RT
- 1.7. Targeted Radionuclide Therapy
- 1.8. Hadron Therapy
- 1.9. New strategies in quality assurance in RT
- 1.10. Risk analysis methods for patient safety in RT

### **Track 2: Imaging Physics**

- 2.1. Computed tomography
- 2.2. X-ray Imaging/ Mammography
- 2.3. Advances in PET and PET/CT
- 2.4. Advances in SPECT and SPECT/CT
- 2.5. Quantitative Imaging for Diagnosis and Treatment. Targeted Radionuclide Therapy
- 2.6. Magnetic Resonance Imaging & Spectroscopy
- 2.7. Radiation protection, security and risk analysis methods in Nuclear Medicine and Diagnostic Radiology
- 2.8. Quality Management in Nuclear Medicine and Diagnostic Radiology
- 2.9. Digital Phantoms and Monte Carlo Methods