



1ST ESTRO PHYSICS WORKSHOP

*Science in
development*

17-18 November 2017
Glasgow, UK

Medical physics research and treatment planning development for therapy with scanned particle beams

Chairs: H. Nyström and D. Georg

Short description of the workshop:

The increasing number of proton and ion beam centers in Europe offer numerous research and development opportunities. ESTRO has recently launched a proton therapy network in which two workpackages are physics driven and physics oriented, respectively. The aim of this workshop is to present these current activities and stimulate medical physics research in and beyond the existing topics.

Invited speakers will introduce the different sessions and will present their current activities and research results. A specific time for discussion will be dedicated at the end of each session in order to allow direct exchange between the speakers and the audience. Discussions will be stimulated by the chairs in order to foster scientific exchanges and networking activities of the workshop participants.

Preliminary program - list of topics to be covered:

Topics would be organized per research area:

- Dosimetry and dose calculation
- Monte Carlo applications in treatment planning
- Robust optimisation
- 4D projects and Motion management in treatment planning
- Image guided and adaptive particle therapy
- Quality assurance.

Expected outcome:

- Stimulate collaboration within the upcoming proton radiotherapy community in Europe
- Stimulate initiatives and participation in consortia seeking research funding
- Present and explore research opportunities as research beam time with protons/ions is limited in Europe
- Defining more focused areas for future workshops.

Target group:

Medical physicists and PhD students in research, developers, clinical medical physicists.