



Schweizerische Gesellschaft für Strahlenbiologie und Medizinische Physik

Société Suisse de Radiobiologie et de Physique Médicale

Società Svizzera di Radiobiologia e di Fisica Medica

Swiss Society of Radiobiology and Medical Physics

Member of the European Federation of Organisations for Medical Physics (EFOMP) and the International Organization for Medical Physics (IOMP)

## DESCRIPTION OF SSRMP WORKING GROUP

Working group name: IGRT

Chair person: Jean-François Germond

Aims and roadmap:

The working group on IGRT is dealing with dedicated image guided issues in the context of radiation therapy. It was the first group worldwide to publish in 2010 a recommendation on IGRT (as SSRMP recommendation No. 16) which is still valid for covering parts of the recently published updated version of the Swiss radiation protection ordinance. As asked by the Swiss medical physics community, it was planned at that time to issue precise guidelines about how to implement the recommendation in the daily routine. Meanwhile other organizations have issued their own recommendations and this has triggered commercial firms to provide the necessary tools for satisfy their requirements. In consequence, radiooncology centers can nowadays easily acquire these tools, including the necessary training, so that specific Swiss guidelines are superfluous.

On the other hand, the dissemination of IGRT has opened many news domains in its use as well as novel use of medical imaging in radiooncology. In the category where extensions of the present recommendation QA will be needed, we can mention 4-D IGRT, dose delivered by IGRT, guidance during irradiation, guidance for adaptive therapy. In the category of novel imaging techniques, we have QA recommendation for image fusion and auto-contouring as well as clinical workflow related challenges of IGRT, dosimetric consequences and impacts on margins by the usage of IGRT to name only a few. Although these topics could be addressed in separated working groups, their all participate to image guidance and consequently the IGRT working group is ideal as a general platform for all of them.

Anticipated results:  Report  Recommendation  Other:

Science relevance: Advance in medical imaging

Professional relevance: keeping up-to-date with all evolutions in IGRT and related fields

Provide the medical physicists community with : recommendations custom-made for them

Educational relevance: Provide references to new imaging techniques

Start date: 2017 with its new goal

End date: