Joint annual meeting of Swiss and Austrian Physical Societies 2017



Contribution ID: 223

Type: Poster

[924] Analysis of degraded energy spectra, and its importance for proton therapy facilities

Wednesday 23 August 2017 12:35 (1 minute)

In a cyclotron-based proton therapy facility, the energy selection is performed by means of a degrader. The interaction of the proton beam

with the degrader creates low energy tails that alter the beam quality. The analysis of the degraded energy spectra is hence important,

not only to better understand the performance of an existing facility such as PROSCAN at the Paul Scherrer Institut (PSI), but also to support

the development of new facilities. An accurate analysis of the energy spectrum from the PSI degrader has been performed with Monte Carlo and particle tracking codes and used to support the design of the a superconducting gantry.

Author: Ms RIZZOGLIO, Valeria (Paul Scherrer Institut)

Co-authors: Dr ADELMANN, Andreas (Paul Scherrer Institut); Dr MEER, David (Paul Scherrer Institut)

Presenter: Ms RIZZOGLIO, Valeria (Paul Scherrer Institut)

Session Classification: Poster Session

Track Classification: Biophysics, Medical Physics and Soft Matter