Towards a Radiotherapy Treatment Planning System based on Geant4

A Treatment planning system is a crucial tool for radiotherapy applications. In this PhD project we will explore the possibility to build a Geant4 based TPS. Using Geant4 to prepare TPS for the radiotherapy facilities that are not provided by their own TPS software, will improve the reliability of treatment planning, based on the radiation-matter physics interactions included in the MC toolkit. The PhD student is expected to have a reasonable knowledge of medical physics and of radiotherapy applications, as well as the interest of developing MonteCarlo codes. The study will be complemented by detailed measurements of different particle fields by several accelerators.

For more information

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