

Geant4: an introduction to the application development

Friday, 9 May 2014 11:00 (1 hour)

Geant4 is a software toolkit for the simulation of the interaction of particles with matter, developed by an international collaboration of physicists, engineers and computer scientists. Its application areas include high energy physics experiments, nuclear physics, astrophysics and astroparticle physics, space science, medical physics and medical imaging, radiation protection, and education. Geant4 encompasses a wide set of tools for all the domains of detector simulation and an abundant set of Physics Processes handle the diverse interactions of particles with matter across a wide energy range, as required by Geant4 multi-disciplinary nature. This seminar provides an overview of Geant4 capabilities and illustrates the major features available in the toolkit to simulate an experimental scenario. Special emphasis is placed in presenting a methodological approach to developing and validating Geant4-based simulations for experimental applications.

Presenter: Dr DOTTI, A (SLAC)