

10th Geant4 Space Users Workshop

Tuesday, 27 May 2014 - Thursday, 29 May 2014

Jackson Center, Huntsville, Alabama, USA

Scientific Programme

Geant4 Space Users' Workshop –G4SUW– is focused on new results on space radiation interaction with components, sensors and shielding analysis, as well as on Geant4-based tools and developments applicable to space missions.

The Geant4 particle transport toolkit is jointly developed by a world-wide collaboration and is intended for a wide range of applications in HEP, medical field, and space physics and engineering. In recent years, space and astrophysics has become a significant user category, with applications ranging from instrument and detector response verification to space radiation shielding optimization, component effects, support of scientific studies, and analysis of biological effects.

Main topics for next G4SUW will include:

Single Event Effects (SEE) simulation. Geant4-TCAD coupling

Microdosimetry

Planetary exploration applications

Space electronics and science detectors

Simulation of astronaut radiation hazards

Interfaces and tools to space environment analysis tools such as SPENVIS

Large-scale simulations requiring event biasing and/or GRID capabilities

General shielding optimization applications