

Abstract Submitted
for the APR20 Meeting of
The American Physical Society

Predictions of secondary particle spectra inside the International Space Station (ISS) MOHAMMAD SABRA, USRA STI - USRA Science and Technology Institute — As part of a study to assess the contribution of secondary particles in producing radiation damage to astronauts as well as electronic devices located on the ISS, Geant4 calculations have been made to predict secondary particle spectra vs shielding inside ISS module. A simplified shielding model is used for the radiation transport calculations. The calculations take into account secondary particle production from Galactic Cosmic Rays (GCR) protons. Comparisons of the predicted particle spectra for different Geant4 nuclear physics models will be presented and discussed.

Mohammad Sabra
USRA STI - USRA Science and Technology Institute

Date submitted: 12 Jan 2020

Electronic form version 1.4