



Contribution ID: 1239

Type: Poster

## Hadroproduction in FLUKA and Geant4: agreement with data?

Monte Carlo tool kits such as FLUKA and Geant4 have models of the production of secondary hadrons in the interactions of few GeV/c protons and charged pions with nuclei implemented. For the first time, the comprehensive and precise hadroproduction data published by the HARP-CDP group permit a critical comparison of data with modelling. Overall production cross-sections are reasonably well reproduced, within factors of two. In more detail, there are areas with poor agreement that are unsatisfactory and call for modelling improvements. Overall, the current FLUKA simulation fares better than the current Geant4 simulation.

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**Track Classification:** 04 - Hadronic Structure, Parton Distributions, soft QCD, Spectroscopy