

Nucleus-Nucleus hadronic inelastic cross section

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Short description: the test calculates the total cross section of hadronic inelastic scattering of hadron-nucleus and nucleus-nucleus collisions. The total inelastic scattering cross sections are calculated for incident protons and carbon nuclei.

Geant-val layout: NucNucInelXS

Reference data: The cross sections are then compared to reference experimental measurements publicly available in the Experimental Nuclear Reaction Data (EXFOR) [1]. EXFOR provides libraries containing an extensive compilation of experimental nuclear reaction data.

1. V .V. Zerkin and B.Pritychenko. The experimental nuclear reaction data (EXFOR): Extended computer database and Web retrieval system. NIM A, Vol. 888, 2018, pp: 31-43

Tested physics list: The total cross section of hadronic inelastic scattering is common to all the physics lists.

-- SusannaGuatelli - 2019-04-18

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