

Extension of the Liège intranuclear cascade model at incident energies between 2 and 12 GeV. Aspects of pion production

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The validity of the standard version of the Liège Intra-Nuclear cascade (INCL) model, which has been shown to be quite successful for the description of spallation reactions, is limited to an upper incident energy of more or less 2 GeV, because inelastic elementary processes are restricted to the excitation and de-excitation of the Delta resonance. In this talk, I will present how the INCL model is extended to higher incident energy by including other inelastic elementary collisions.

I will also present predictions of the modified model for production of charged pions by proton and pion beams off nuclei, compared with experimental data of the HARP collaboration for beam energies between 2 and 12 GeV.

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Classification de Session: In honour of Joseph Cugnon

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