ID de Contribution: **12** Type: **Non spécifié**

Perspectives and future for intranuclear-cascade and nuclear-de-excitation models

jeudi 7 avril 2011 16:45 (25 minutes)

Intranuclear-cascade models (INC) are a precious tool for the description of hadron-nucleus reactions between ~0.1 and a few GeV, as it has been proved by extensive comparisons and benchmarks. The development of such models is however still active and is motivated at the same time by fundamental questions and applications. Moreover, INC models provide an accurate understanding of the entrance channel of hadron-induced nuclear reactions: we can thus use them as a solid starting point for the study of nuclear de-excitation.

I will begin by discussing the open theoretical challenges posed by INC models. I will then focus on the Liège Intranuclear Cascade model (INCL) and outline the most important extensions that are planned for the near future (high energies, exotic nuclei, nucleus-nucleus reactions…). The usefulness of INC models in the context of nuclear-de-excitation studies will be demonstrated by a few interesting examples.

Auteur principal: Dr MANCUSI, Davide (University of Liège)

Orateur: Dr MANCUSI, Davide (University of Liège)

Classification de Session: In honour of Joseph Cugnon