ID de Contribution: **107** Type: **Non spécifié**

NA61-SHINE: Hadron production measurements for neutrino/cosmic rays experiments

vendredi 12 mars 2010 08:30 (15 minutes)

Both accelerator neutrino (e.g. T2K) and cosmic rays (e.g. Auger) experiments are detecting particles produced in primary and secondary hadronic interactions: neutrinos and muons from pi/K mesons decay respectively. The precise prediction of neutrino fluxes (for all species, different sources, etc) is crucial for the next generation of accelerator neutrino experiments to predict the expected number of signal and background events, while the precise prediction of air showers characteristics (longitudinal distribution, muon density, etc) is mandatory for the understanding of the composition of cosmic rays. In both cases those predictions can be improved by new hadron production measurements such as those performed in the NA61-SHINE experiment at CERN SPS.
This talk presents the capabilities of hadron production measurements in NA61 in terms of acceptance and particle identification and how it covers the needs for the T2K neutrino flux predictions.

Author: M. ABGRALL, Nicolas (University of Geneva, DPNC)

Orateur: M. ABGRALL, Nicolas (University of Geneva, DPNC)

Classification de Session: Neutrinos (cont)