



Contribution ID: 25

Type: **Presentazione 15 minuti**

Results from the LHCf experiment

Thursday, 12 April 2012 11:25 (15 minutes)

LHCf is an experiment designed to study the very forward production of neutral particles produced in collisions at the LHC. Its results will be useful to calibrate the hadron interaction models of the Monte Carlo codes which are used for the interpretation of energy spectrum and composition of high-energy cosmic rays as measured by air-shower ground arrays. The experiment has already completed taking data in proton-proton collisions at $\sqrt{s} = 900$ GeV and at $\sqrt{s} = 7$ TeV during 2009 and 2010. The detectors are now being upgraded and they will be installed again in the LHC tunnel for proton-ion collisions at the end of this year, and for future operation with protons at $\sqrt{s} = 14$ TeV. Results about photon and neutral pion spectra, and comparisons with the predictions obtained from MC simulations will be reported.

Primary author: BONGI, Massimo (INFN - Sezione di Firenze)

Presenter: BONGI, Massimo (INFN - Sezione di Firenze)

Session Classification: Astroparticelle

Track Classification: Fisica Astroparticellare