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## Neutral particles energy spectrum for 900 GeV and 7 TeV p-p collisions as measured by the LHCf experiment

*Monday 4 June 2012 15:15 (20 minutes)*

The Large Hadron Collider (LHC) gives us a unique opportunity to study hadron interactions at the collision energy of  $10^{17}$  eV in the laboratory system. The data collected so far by the LHCf experiment is proving instrumental in increasing our comprehension of the chemical composition of Ultra High Energy Cosmic-Rays (UHECRs) by improving hadron interaction models used in air shower simulations of UHECRs.

The analysis has now reached a stage where results can be presented and energy and  $p_T$  spectra of various neutral particles can be shown. The data has been collected at centre of mass energies of 900 GeV and 7 TeV. In the talk an outlook will also be given on future collider runs with proton-ions and proton-proton at centre of mass energies of 14 TeV.

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