

# Status and Prospects of the LHCf experiment

*Wednesday, 19 March 2025 09:45 (45 minutes)*

Precise knowledge of high energy hadronic interaction is an important key to understand air shower development. The LHCf experiment measures neutral particles such as photons, neutral pions, and neutrons, produced in the very forward region of LHC collisions, which contribute to the air shower development. Since the LHC start, LHCf performed many operations with pp collisions at several collision energies from 0.9 to 13.6 TeV and pPb. In addition, we will have an operation with proton-oxygen collisions scheduled in this July. In this talk, we will present the results and prospects from the obtained data as well as for proton-oxygen collision data.

**Primary authors:** MENJO, Hiroaki (Nagoya University); LHCf COLLABORATION

**Presenter:** MENJO, Hiroaki (Nagoya University)