

## Status and Prospects of the LHCf experiment [Online]

*Tuesday 9 July 2024 09:30 (30 minutes)*

The LHCf experiment measures neutral particles, such as photons and neutrons, emitted in the very forward region of LHC collisions. These energetic particles play an important role in the air shower development induced by very high energy cosmic-rays. In September 2022, we performed data taking with proton-proton at  $\sqrt{s} = 13.6$  TeV and 300 M events were recorded, which is about 10 times larger statistic than that of the operation in 2015. This high statistics data allow us to address measurements of strange particles, K0s and lambda. Additionally, we will have an operation with proton-Oxygen collisions, which are ideal condition to simulate interactions between cosmic-rays and atmospheric nuclei. In this presentation, we reports about the recent results and future prospects.

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

**Session Classification:** Invited talks