Status and Prospects of the LHCf and RHICf experiments

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Executive summary

- *What is this contribution about?*
  - Reviewing a recent analysis result and introducing future plans of LHCf and RHICf experiment.
- *Why is it relevant / interesting?*
  - Hadronic interaction at high energy collisions which is a key of UHECR observation issues like muon excess and mass composition.
- *What have we done?*
  - LHCf/RHICf have operations with pp/pPb at several energies in the past.
  - A result of Inelasticity measurement at pp, $\sqrt{s}$=13TeV (JHEP 2020, 016) is shown.
- *What is the result future?*
  - LHCf: pp 14TeV in 2022, **pO** + OO in 2023 or 2024 with an upgraded silicon DAQ.
  - RHICf II: pp (+pA) in 2024 with a new detector
  - Focus on studying detail physics processes, strange hadron measurements, and pA