Contribution ID: **346** Type: **Parallel session talk**

# Preliminary results from the cosmic data taking of the BESIII cylindrical GEM detectors

*Thursday, May 27, 2021 8:42 AM (18 minutes)*

The leptonic collider BEPCII (Beijing Electron Positron Collider II) at IHEP in Beijing hosts the BESIII (Beijing Spectrometer III) experiment. The data taking is running since 2009 and 10 more year extension has been approved. Upgrades of the machine and the detector are on going to improve the measurement precision and to extend its physics program. In this presentation a description of the upgrade of the IT (inner tracker) with a cylindrical GEM (Gas Electron Multiplier) will be shown. The CGEM-IT is composed of three triple-GEM detectors cylindrically shaped. An analogue readout through the TIGER ASIC assures the time and charge measurement and it guarantee excellent performance on the wide range of incident angles at 1 Tesla magnetic field. Actually, two of the three layers have been assembled together and a complete test with the final configuration of readout chain and HV distribution is ongoing.

## TIPP2020 abstract resubmission?

Yes, this would have been presented at TIPP2020.

## Funding information

**Primary authors:** FARINELLI, Riccardo (Universita e INFN, Ferrara (IT)); CIBINETTO, Gianluigi (INFN Ferrara); GRECO, Michela (INFN-UniTO)

**Presenter:** GRECO, Michela (INFN-UniTO)

**Session Classification:** Experiments: Trackers

**Track Classification:** Experiments: Experiments: Trackers