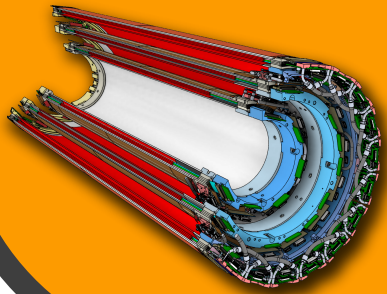


Development and operation of the CGEM Inner Tracker for the BESIII experiment

Alberto Bortone on behalf of the CGEM-IT working group

CGEM - IT



The **CGEM-IT** (Cylindrical GEM Inner Tracker) detector consists of **three detector layers** with independent gas volume, power management and readout electronics. Each layer consists of **three GEM foils** (Gas Electron Multiplier), a cathode and an anode for signal collection. The detector will upgrade the internal tracking system of the **BESIII** experiment by improving spatial resolution in both the r/ϕ -plane and z -axis without compromising material budget and radiation tolerance.



CGEM-IT electronic chain main components

Test beam with planar detectors

