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Type: Poster

Numerical modeling and simulation for GEM signals.

Thursday 15 December 2022 14:00 (1 hour)

To observe the time performance of the Gas Electron Multiplier (GEM) detector with various parameters, a simulation is carried out.

The signal and induced current are determined using a 5.9 KeV X-ray photon along with a muon source at various energies. The gain and time resolution factors have been optimized for single and quadruple-layer GEM detectors. Different detector parameters, such as gas composition, initial particle position, energy, and electric fields, are adjusted in order to estimate the value of time resolution.

Session

Future Experiments and Detector Development

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