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A global track finding algorithm for CGEM +DC with Hough Transform

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A present-day detection system for charged tracks in particle physics experiments is typically composed of two or more types of detectors. Then global track finding with these sub-detectors is one important topic. This contribution is to describe a global track finding algorithm with Hough Transform for a detection system consist of a Cylindrical-Gas-Electron-Multiplier (CGEM) and a Drift Chamber (DC). The detailed Hough Transform of the hits detected by CGEM and DC, the optimization of the binning of Hough maps, the global track fitting, the iterative way to determine tracks and some results with simulated samples are going to be presented.

Consider for promotion

No

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