

Track finding algorithm for the TPC detector at CEE experiment

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The Cooler-Storage-Ring External-target Experiment (CEE) is a spectrometer to study the properties of nuclear matter at high baryon density region. The CEE time projection chamber (TPC), which uses the state-of-the-art SAMPA electronics read-out chips is the key sub-detector of CEE. This talk presents the track-finding algorithm that is used for event reconstruction for the TPC detector at the CEE experiment. The algorithm is based on Cellular Automaton and Combinatorial Kalman filter techniques, which provides a good balance between speed and efficiency to find charged tracks and therefore meets the requirements of CEE experiment.

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