Preliminary Results from the Commissioning of the AT-TPC at MSU

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The Active-Target Time Projection Chamber (AT-TPC) was recently commissioned at MSU using a stable beam of 4He at 3 MeV per nucleon from ReA3 on a target of He+CO2 gas. Tracks were measured in the detector at magnetic field strengths of 0, 0.5 and 1 Tesla. Analysis of the data is underway. This talk will focus on the application of the Kalman filter method to this highly nonlinear problem, and preliminary results will be presented.

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