

Abstract Submitted
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Analysis Techniques for the Neutron Induced Fission Fragment Tracking Experiment (NIFFTE) RICHARD BAKER, Cal Poly San Luis Obispo, NIFFTE COLLABORATION — The NIFFTE experiment has developed and tested a Time Projection Chamber (TPC) for the study of neutron induced fission events. The TPC is designed to measure fission cross sections with better than 1% precision. The TPC creates a three dimensional pixelated image of the charge deposited as the fission fragments pass through the gas volume. The analysis of this data requires robust algorithms for reconstructing the tracks of the charged particles and identifying each particle track as either a proton (from n-p scatter), alpha (decays in target) or a fission fragment. This talk will provide a comprehensive overview of the reconstruction and analysis techniques that have been developed for NIFFTE with a discussion of preliminary results from engineering studies.

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