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An overview of the Neutron Induced Fission Fragment Tracking Experiment (NIFFTE) including first detector performance results JENNIFER KLAY, Cal Poly San Luis Obispo, NIFFTE COLLABORATION — NIFFTE is an exciting new project to make high precision measurements of nuclear fission cross sections using a time projection chamber (TPC). The application of the NIFFTE TPC to nuclear fission studies will augment previous work by measuring both fission events and scattering events simultaneously. The precision tracking and reconstruction of the TPC will allow clean differentiation between fission fragments, alphas and protons. Prototypes of the NIFFTE TPC have been taking data for both spontaneous fission (Cf 252) and neutron beam on very thin U238 targets. This talk will give a general overview of the scientific goals of the project as well as discuss the status of the reconstruction and particle identification efforts. Plans for the coming year will also be discussed.

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