

Abstract Submitted  
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**NIFFTE Overview and Goals** SCOTT STEWART, Abilene Christian University, NEUTRON INDUCED FISSION FRAGMENT TRACKING EXPERIMENT COLLABORATION — The Neutron Induced Fission Fragment Tracking Experiment (NIFFTE) will make fission cross section measurements for next generation nuclear reactors using a Time Projection Chamber (TPC). Collaborating institutions are Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Idaho National Laboratory, Georgia Institute of Technology, Abilene Christian University, Oregon State University, Cal Poly San Luis Obispo, Colorado School of Mines, and Ohio University. It is funded under the Global Nuclear Energy Partnership (GNEP) in order to increase the precision needed for the design of a new generation of fast neutron reactors. The TPC is a new tool to improve the existing measurements that used fission chambers. The TPC will allow an overall view of the fission event and will distinguish it from background processes; primarily alpha decay. The experiments are planned at the Los Alamos Neutron Scattering Center (LANSCE) utilizing neutron beams from 10 keV to 10 MeV where existing fission cross sections have typical uncertainties of 5%.

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