

Abstract Submitted
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Techniques for Measuring the $^{239}\text{Pu}(\text{n},\text{f}) / ^{235}\text{U}(\text{n},\text{f})$ Cross Section Ratio using the NIFFTE Time Projection Chamber¹ BRANDON SEILHAN, Lawrence Livermore National Laboratory, NIFFTE COLLABORATION — The Neutron Induced Fission Fragment Tracking Experiment (NIFFTE) aims to measure the $^{239}\text{Pu}(\text{n},\text{f})$ cross-section to better than 1% across the 250 keV to 20 MeV incident neutron energy range through the use of a purpose-built Time Projection Chamber (TPC). Prior to the 2013 LANSCE run cycle, the active area of the TPC was doubled and now provides 4π coverage with nearly 6000 independent readout channels. The current status of the $^{239}\text{Pu}/^{235}\text{U}(\text{n},\text{f})$ cross-section measurement, including techniques for handling the data-rates associated with the large spontaneous alpha activity of ^{239}Pu in the fission TPC will be discussed.

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