

Abstract Submitted
for the APR14 Meeting of
The American Physical Society

The fissionTPC MIKE HEFFNER, Lawrence Livermore Natl Lab, NIFFTE COLLABORATION — A new instrument to study fission, called the fissionTPC, has been constructed to make high accuracy measurements of neutron induced fission cross-sections of the major actinides. Most of the cross sections have been measured over the last 60 years, although improvements in the accuracy of the data appear unlikely with the current technology. A potential breakthrough is the deployment of the Time Projection Chamber (TPC) which was developed within the particle physics community. The NIFFTE collaboration, a group of 7 universities and 4 national laboratories, has undertaken the task of building the first TPC for this purpose. In this talk I will present the fission TPC design, challenges that had to be addressed, and the performance of the detector.

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Date submitted: 09 Jan 2014

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