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Measuring the Alpha Decay to Spontaneous Fission Branching Ratio of Cf-252 with the NIFFTE TPC LUCAS SNYDER, LLNL, NIFFTE COLLABORATION — The NIFFTE collaboration has developed a fission Time Projection Chamber (TPC) designed to measure the neutron induced fission cross section to a higher accuracy than has been measured previously. The fission TPC has completed a key development phase by measuring the alpha/SF branching ratio of Cf-252. The branching ratio was used as a benchmark in working toward confirming the ability of the fission TPC to track and identify alpha particles and fission fragments. The results of the branching ratio and particle identification measurements will be presented.

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