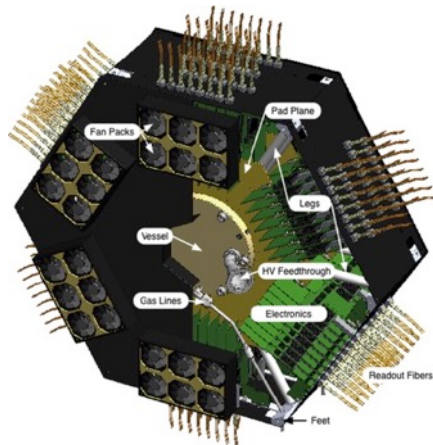


High-Precision Cross-Sections with the Fission TPC

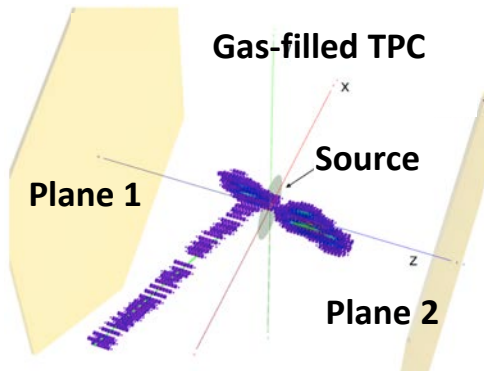
Research Overview

High-precision (<1%) measurement of neutron-induced fission cross-section using a unique Time Projection Chamber. Energy and defense applications.

Fission TPC
(~6000 channels)



Reconstructed 3D Event
(SF + α from Cf-252)



Potential Collaborations

- **Fission Physics:**
 - Ternary fission yield
 - Hydrogen target R&D
 - Fission chamber comparison
 - Actinide cross sections
- Available to discuss collaborations for measurements with FissionTPC

Dissertations

Fission Fragment Angular Distributions in n-induced Fission of ^{235}U (V. Kleinrath, 2015)

The α -decay to Spontaneous Fission Branching Ratio of ^{252}Cf (L. Snyder, CSU, 2012)

Fission Fragment Mass Yields
(Josh Gearhart, UC Davis, NSSC, since 2015)

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