

Abstract Submitted
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High-Resolution Correlated Fission Product Measurements of $^{235}\text{U}(n_{th}, f)$ with SPIDER¹ DAN SHIELDS, Los Alamos National Laboratory, Colorado School of Mines, SPIDER TEAM — The SPIDER detector (SPectrometer for Ion DEtermination in fission Research) has obtained high-resolution, moderate-efficiency, correlated fission product data needed for many applications including the modeling of next generation nuclear reactors, stockpile stewardship, and the fundamental understanding of the fission process. SPIDER simultaneously measures velocity and energy of both fission products to calculate fission product yields (FPYs), neutron multiplicity (ν), and total kinetic energy (TKE). These data will be some of the first of their kind available to nuclear data evaluations. An overview of the SPIDER detector, analytical method, and preliminary results for $^{235}\text{U}(n_{th}, f)$ will be presented. LA-UR-15-20130

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