

Abstract Submitted
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Measurement of the Spectrum of Neutrons Emitted in Neutron-Induced Fission ROBERT HAIGHT, Los Alamos National Laboratory — The spectrum of neutrons emitted in fission is the source term for neutron transport in fission reactors and other systems. This spectrum is expected to change with incident neutron energy, and the energy dependence is described by the Los Alamos Model and implemented in the ENDF/B-VII evaluated nuclear data file. A collaboration among researchers from LANL, CEA (France), and Lawrence Livermore National Laboratory is measuring the fission neutron spectrum as a function of incident neutron energy using a double time-of-flight technique at the Los Alamos Neutron Science Center. Recent results for that part of the spectrum between 1 and 8 MeV for fission of ^{235}U and ^{239}Pu induced by neutrons from 1 to 50 MeV will be reported, and plans for future measurements will be outlined.

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