

Abstract Submitted
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Prompt Fission Neutron Multiplicities for ^{241}Pu using Surrogate Reactions¹ OLUWATOMI AKINDELE, Univ of California - Berkeley, JASON BURKE, ROBERT CASPERSON, RICHARD HUGHES, Lawrence Livermore National Laboratory, ERIC NORMAN, Univ of California - Berkeley, ANTTI SAASTAMOINEN, Texas AM University, BARBARA WANG, Lawrence Livermore National Laboratory — The prompt fission neutron multiplicity for ^{241}Pu was measured at the Texas A&M University Cyclotron using the NeutronSTARS array. Due to the short half-life (14.3 yrs) of ^{241}Pu , inelastic scattering on ^{242}Pu with 55 MeV alpha particles was used as a surrogate. The average neutron multiplicity ($\bar{\nu}$), and the neutron multiplicity distribution for equivalent neutron energies up to 20 MeV are discussed and reported.

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