

Abstract Submitted
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Prompt γ rays and neutrons from fission¹ E. KWAN, C.Y. WU, A. CHYZH, J. GOSTIC, R. HENDERSON, Lawrence Livermore National Laboratory, R.C. HAIGHT, H.Y. LEE, J.M. O'DONNELL, B.A. PERDUE, T.N. TADDEUCCI, Los Alamos National Laboratory — Nuclear data are needed to test the accuracy of calculations from nuclear reaction codes. Information on the prompt γ -ray distributions from fission is sparse and only a handful of published experiments data that measured the prompt γ -ray distribution above incident neutron energies of 1 MeV can be found. In addition, improvement on the accuracy and shape of neutron spectrum from the fission of actinides been requested by the nuclear data community². An investigation on the shapes of the neutron and γ -ray distributions from the spontaneous fission of ²⁵²Cf and the neutron-induced fission of ²³⁵U was undertaken using the Chi-Nu detector array at the Weapons Neutron Research Facility of the Los Alamos Neutron Science Center. Preliminary results will be presented.

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²“Prompt Fission Neutron Spectra of Major Actinides,” INDC(NDS)-0571, ed. R. Capote Noy, (2010).

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