

EVALUATION OF $^{235}\text{U}(n,f)$ BETWEEN 100 KeV and 20 MeV*

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ABSTRACT

The $^{235}\text{U}(n,f)$ cross section was evaluated in the energy range from 100 keV to 20 MeV. Experimental data were included up to the 1978 Harwell Conference on Neutron Physics. The evaluation methodology is discussed in detail. The shape and the normalization of the cross section are evaluated in separate steps. An extensive comparison of the evaluation result with experimental data sets is made.

The shape of the cross section obtained in a preliminary version of the present evaluation and a normalization factor extracted from data provided within the framework of this evaluation were used by the Subcommittee on Standards and Normalizations of the Cross Sections Evaluation Working Group to establish $^{235}\text{U}(n,f)$ for ENDF/B-V above 100 keV.

*This work supported by the U. S. Department of Energy.