

NUCLEAR DATA FOR ADS: CODE SYSTEM AND THEORETICAL DATA LIBRARY

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Abstract

Data library for ADS needs should include the large list of cross-sections and yields of secondary products from neutron and proton induced reactions in the wide region of energies and targets. This problem can't be solved by measurements only and application of reliable code systems for calculation of main characteristics of nuclear reactions with nucleons is necessary.

The new code system for these aims has been developed by us earlier in the framework of ISTC project and the database for fission cross-sections in ENDF-B/VI format has been developed on the base of these calculations. At present the new round of calculations has been carried out and new data for spectra of secondary neutrons, yields of spallation residuals (preliminary data), total and elastic cross-sections and neutrons and γ -quants from fission fragments (data libraries) were obtained.