

Coding of differential neutron multiplicity distributions

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CAJaD wants to compile differential neutron multiplicity distributions as given in the paper by L.Pienkowski et al., PR/C 56, 1909 (1997).

The data are labelled as ds/dN (N being the neutron multiplicity) and given in "millibarns".

The data cannot be compiled with SF6 = MLT because this would require units of type YLD (such as N/PART). They cannot be compiled as neutron production cross section because there is an additional independent variable, N.

The data can be considered either as differential multiplicity, or as a new type of differential neutron production cross section, which is differential by N.

We propose to introduce a new code for SF6, to be used either alone or in combination with MLT, e.g.:

82-PB-0(N,X)0-NN-1,,SDN or
82-PB-0(N,X)0-NN-1,,MLT/DN

Although the data in the above paper are given in mb, I believe that the units should rather be "mb per particle" or equivalent. A new unit type would be needed.