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From: O. Schwerer *O. Schwerer*

Subject: **Proposed addition to Lexfor page on Production cross sections:**
"Unweighted" production cross sections

At the 1995 NRDC meeting, it was agreed to introduce a new code for production cross sections which are not weighted by the multiplicity of the product particle, with 'UNW' in REACTION SF5, e.g.(G,X)0-NN-1,UNW,SIG.

For this, the following addition to Lexfor is proposed.

Add to Lexfor page on "Production Cross Sections"

Unweighted production cross section

Sometimes the arithmetical sum of all reactions resulting in the production of one or more outgoing particles Y, WITHOUT weighting by the multiplicity of Y, is given. If not more than 2-3 reactions are contributing in the energy range measured, this quantity can be given as the explicit sum of these reactions:

e.g. $(\gamma, n) + (\gamma, 2n)$

(as opposed to the neutron production cross section $(\gamma, n) + 2*(\gamma, 2n) + \dots$)

If however more than 2-3 reactions contribute, the data are to be coded as production cross section with the branch code UNW in SF5:

e.g.(G,X)0-NN-1,UNW,SIG) = $(\gamma, n) + (\gamma, 2n) + (\gamma, n+p) + (\gamma, 3n) + \dots$

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