MEMO CP-C/77

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From: T.W. Burrows & V. McLane VM

Subject: Multiplicity

Enclosed is a proposed new LEXFOR entry for Multiplicity.

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Multiplicity

Definition: Particle yield per event.

Quantity Code: MLT in REACTION SF.

Examples:

(-----(P,A)-----,,MLT,G) gamma yield from a (p,alpha) reaction

(----(N,X)O-G-O,,MLT) gamma yield from all neutron-induced reactions

Partial Multiplicity

In many cases the experimental arrangement will be such that not all of the particles will be detected. In such cases, the branch code PAR must be used in REACTION SF5.

The most common experimental occurrence of this will be limits on the energies of the particles detected.

Authors will also often deduce the multiplicities as a function of spin or momentum transfer; these deduced results should not be coded.

Neutron Multiplicity

The neutron multiplicity should be coded, as given above, only for non-neutron-induced reactions. For neutron multiplicity for neutron-induced reactions, see Neutron Yield.