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Memo 4C-3/162

To: Distribution 7 April 1976

From: H.D. Lemmel

Subject: Differential cross-section relative to its value at a given angle

Reference: Lexfor, Example 11

In Exfor-Entry 30327. to be transmitted, we had the case that a differential cross-section relative to its value at a given angle, was tabulated at several neutron energies. We suggest that the solution we found be entered in Lexfor as an extension of Example 11 which anyway needed a minor correction due to a superseded STANDARD code. The proposed Lexfor page is attached.

Attachment

Distribution:

Clearance: J.J. Schmidt

L. Lesca, NDCC (5)
S. Pearlstein, NNCSC (5)
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NDS: P.M. Attree
M. Khalil
R. Lessler
H.D. Lemmel
A. Lorenz
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file

Example 11 :

A differential cross-section relative to its value at a given angle,

$$\text{e.g.} \quad \frac{\frac{d\sigma_{(n,p)}}{d\Omega}(E_n;\vartheta)}{\frac{d\sigma_{(n,p)}}{d\Omega}(E_n;90^\circ)}$$

is entered in the following way:

```
BIB
...
ISØ-QUANT   (8-Ø-16,NP,DA,REL)
STANDARD    RELATIVE TO VALUE AT 90. DEGREES
...
ENDBIB
CØMMØN
EN
MEV
2.
ENDCØMMØN
DATA
ANG         DATA        DATA-ERR
ADEG        ARB-UNITS   PER-CENT
30.         2.2         5.
60.         1.4         3.
90.         1.
120.        0.8         2.
...         ...         ...
```

or, if similar data are given at several energy values:

```
...
CØMMØN
ANG       1ANG      2
ADEG       ADEG
0.         90.
ENDCØMMØN
DATA
EN          DATA      1DATA-ERR   DATA      2
MEV         ARB-UNITS  PER-CENT   ARB-UNITS
2.4         1.8        5.         1.
2.6         1.74       5.         1.
2.8         1.73       4.5        1.
...         ...        ...        ...
```

Note: The column DATA 2, although containing throughout only the value 1. , serves the purpose to define, in computer-intelligible way, the meaning of the values given in the column DATA 1 .