Memo 4C-4/29

Date: May 25, 1978
From: CJD
Subject: EXFOR Dictionary Additions

Compiling into EXFOR the articles by Nikolenko et al (YF,23,(6),1159, 1976) and Akopyan et al (Lowell -76,2,1243) we have encountered a difficulty to enter the values relating to different spin states of incident particles, such as $\Gamma_n^- / (\Gamma_n^- + \Gamma_n^+)$ and $(a^+ - a^-)$, which refer to different neutron spin directions ($S_z = \pm 1/2$).

As the codes for a specification of a spin direction are absent in the EXFOR dictionaries we suggest to discuss the possible ways of solving this problem. It would be an inclusion into the dictionary 31(SF5 - Branch) or into the dictionary 34(SF8 -Modifier) the codes for a specification of a spin direction of entry channel. For example, one can write for neutrons with $S = \pm 1/2$ the following codes in SF5: SD - 0.5, SD + 0.5 (a Spin Direction).

The following codes should be entered for deuterons with the spin meaning 1 and its projections - 1,0, +1: SD-1.0, SD+0.0, SD + 1.0.

Another possibility to solve the above problem would be to use a new data heading - SP (a Spin Projection) and enter the spin Projection into a COMMON section under the heading mentioned.

Clearance

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