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Memo CP-E/015

Date: December 3, 2002
To: Distribution
From: OTUKA Naohiko and KATO Kiyoshi
Subject: Spin rotation parameters

We are compiling a reference in which spin rotation parameters are given as a function of angle and energy transfer of an outgoing particle (T. Wakasa et al., Phys. Rev. C**59** (1999) 3177). To compile these measurements, we need the following quantity codes:

Dictionary 36 (Quantities)

SS,POL/DA/DE,,D NO	Spin rotation parameter D(SS) dA/dE
SL,POL/DA/DE,,D NO	Spin rotation parameter D(SL) dA/dE
LS,POL/DA/DE,,D NO	Spin rotation parameter D(LS) dA/dE

We have attached a sample coded entry.

Distribution:

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Sample of coded entry with proposed new code (E1718.020):

T. Wakasa et al., Phys. Rev. C**59** (1999) 3177 Fig.4

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SUBENT        E1718020   20021130                                  E171802000001
BIB                 6         19                                  E171802000002
REACTION   (1-H-2(P,X)0-NN-1,LS,POL/DA/DE,,D)                      E171802000003
           DATA: Polarization transfer coefficient, D(L',S). See   E171802000004
                 Eq.(1) in reference.                              E171802000005
PART-DET   (N)                                                     E171802000006
SAMPLE     Chemical-form of target is CD2.                         E171802000007
           Physical-form of target is gas.                         E171802000008
           Target-thickness is 338mg/cm**2.                        E171802000009
ADD-RES    (COMP)1. Phase shift analysis.(D.V.Bugg and R.A.Bryan,  E171802000010
                 phase-shift solution parametrized in the SAID     E171802000011
                 program of Arnd and Roper, dated 1992.)           E171802000012
                 2. Phase shift analysis.(R.A.Arndt and            E171802000013
                 L.D.Roper, Scattering Analysis Interactive        E171802000014
                 Dial-In program (SAID), phase-shift solution      E171802000015
                 SP98, Virginia Polytechnic Institute and State    E171802000016
                 University (unpublisehd).)                        E171802000017
EN-SEC     (E-DGD,P/N)Energy transfer                              E171802000018
STATUS     (TABLE)Data taken from ftp://ftp.aip.org/epaps/.         E171802000019
                  Corresponding figure is Fig.4, p3182 in          E171802000020
                  reference.                                       E171802000021
ENDBIB              19          0                                  E171802000022
NOCOMMON             0          0                                  E171802000023
DATA                 3         20                                  E171802000024
E-DGD      DATA       DATA-ERR                                     E171802000025
MEV        NO-DIM     NO-DIM                                       E171802000026
 25.0       -0.27      0.242                                       E171802000027
 30.0       -0.331     0.111                                       E171802000028
 35.0       -0.087     0.08                                        E171802000029
 40.0       -0.076     0.059                                       E171802000030
 45.0       -0.069     0.042                                       E171802000031
 50.0       -0.003     0.033                                       E171802000032
 55.0       -0.069     0.029                                       E171802000033
 60.0       -0.058     0.029                                       E171802000034
 65.0       -0.013     0.034                                       E171802000035
 70.0       -0.09      0.041                                       E171802000036
 75.0       -0.071     0.052                                       E171802000037
 80.0       0.059      0.065                                       E171802000038
 85.0       -0.013     0.079                                       E171802000039
 90.0       0.073      0.095                                       E171802000040
 95.0       0.019      0.112                                       E171802000041
 100.0      0.006      0.127                                       E171802000042
 105.0      0.029      0.144                                       E171802000043
 110.0      0.068      0.158                                       E171802000044
 115.0      0.08       0.174                                       E171802000045
 120.0      0.079      0.186                                       E171802000046
ENDDATA             22          0                                  E171802000047
ENDSUBENT           46          0                                  E171802099999
```