

**NATIONAL NUCLEAR DATA CENTER  
Bldg. 197D  
Brookhaven National Laboratory  
P. O. Box 5000  
Upton, NY 11973-5000, U.S.A.**

(Internet) nndc@bnl.gov

Telephone: (631)344-2902  
FAX: (631)344-2806

**Memo CP-C/272 (Revised)**

**DATE:** 8 September 2000  
**TO:** Distribution  
**FROM:** V. McLane  
**SUBJECT:** Polarization Dictionary updates

Attached is a complete list of polarization quantities. If the polarization proposal is accepted, only these quantities should remain in the dictionaries. All others should be marked obsolete.

I have updated all BNL entries which required updates. These will be sent in TRANS C044. Aside from these, I have found only one other entry in the library which needs updating. This entry is from area 2. I will volunteer to update it and send it NEA Data Bank for inclusion in a transmission file.

Distribution:

M. Chiba, Sapporo	S. Maev, CJD
F. E. Chukreev, CAJaD	O. Schwerer, NDS
S. Dunaeva, Sarov	S. Takács, ATOMKI
O. Gritzay, KINR	F. T. Tárkányi, ATOMKI
K. Kato, JCPDG	V. Varlamov, CDFA
M. Kellett, NEADB	Zhuang Youxiang, CNDC
V. N. Manokhin, CJD	NNDC File

,POL	NO	Spin-polarization probability
,POL,D	NO	Spin-polarization probability of deuterons
PAR,POL,G	NO	Polarization for gamma ray specified.
LON,POL,,DSP/ASY	NO	Spin-spin asymmetry for longitudinal spin st.
TRS,POL,,DSP/ASY	NO	Spin-spin asymmetry for transverse spin states
,POL/DA	NO	Spin-polarization probability d/dA
,POL/DA,,AL1	NO	Assc.leg.coef.of 1st kind to fit spin-pol. prob.
,POL/DA,,COS	NO	Cosine coef. for fit to spin-pol. probability
,POL/DA,,LEG	NO	Legendre coef. for fit to spin-pol. probability
,POL/DA,,SN2	NO	Spin-polariz. prob., coef. sum in power sin**2
,POL/DA,D	NO	Diff. spin-polariz. prob. d/dA of deuterons
EM/PAR,POL/DA	NO	Partial emission diff.spin-polar.prob.
PAR,POL/DA	NO	Diff. spin-polarization prob.for partial react.
,POL/DA,,ASY	NO	Asymmetry of polarized particles
,POL/DA,,ASY/PP	NO	Asymmetry as a fn. of inc.parallel/perpend.
LON,POL/DA,,ASY	NO	Polarization asymmetry for longitud.polar.
PAR,POL/DA,,ASY	NO	Partial asymmetry of polarized particles
PAR,POL/DA,P/A,ASY	NO	Asymmetry for given p-alpha pair
,POL/DA,,ANA	NO	Analyzing power
,POL/DA,* ,ANA	NO	Analyzing power for particle specified
,POL/DA,D,ANA	NO	Analyzing power for d
,POL/DA,HE3,ANA	NO	Analyzing power for helium-3, A(y)
,POL/DA,N,ANA	NO	Analyzing power for neutrons, A(y)
,POL/DA,P,ANA	NO	Analyzing power for protons
PAR,POL/DA,,ANA	NO	Partial analyzing power
LL,POL/DA,,ANA	NO	Spin correlation parameter, A(LL)
NN,POL/DA,,ANA	NO	Spin correlation parameter, A(NN)
SL,POL/DA,,ANA	NO	Spin correlation parameter, A(SL)
SS,POL/DA,,ANA	NO	Spin correlation parameter, A(SS)
LL/PAR,POL/DA,,ANA	NO	Partl.spin correlation parameter A(LL)
NN/PAR,POL/DA,,ANA	NO	Partl.spin correlation parameter A(NN)
SL/PAR,POL/DA,,ANA	NO	Partl.spin correlation parameter A(SL)
LL,POL/DA,,C	NO	Spin-correlation parameter, C(LL)
LS,POL/DA,,C	NO	Spin-correlation parameter, C(LS)
NN,POL/DA,,C	NO	Spin-correlation parameter, C(NN)
SL,POL/DA,,C	NO	Spin-correlation parameter, C(SL)
SS,POL/DA,,C	NO	Spin-correlation parameter, C(SS)
LL,POL/DA,,D	NO	Spin-rotation parameter, D(LL)
LS,POL/DA,,D	NO	Spin-rotation parameter, D(LS)
NN,POL/DA,,D	NO	Spin-depolarization parameter, D(NN)
SL,POL/DA,,D	NO	Spin-rotation parameter, D(SL)
SS,POL/DA,,D	NO	Spin-rotation parameter, D(SS)
LL/PAR,POL/DA,,D	NO	Spin-rotation parameter,D(LL),partl.reaction
LS/PAR,POL/DA,,D	NO	Spin-rotation parameter,D(LS),partl.reaction
NN/PAR,POL/DA,,D	NO	Spin-depolarization param.,D(NN),partl. reaction
SL/PAR,POL/DA,,D	NO	Spin-rotation parameter,D(SL),partl.reaction
SS/PAR,POL/DA,,D	NO	Spin-rotation parameter,D(SS), for neutron
LL,POL/DA,N,D	NO	Spin-rotation parameter,D(LL), for neutron
LL,POL/DA,P,D	NO	Spin-rotation parameter,D(LL), for proton
LS,POL/DA,N,D	NO	Spin-rotation parameter,D(LS), for neutron
LS,POL/DA,P,D	NO	Spin-rotation parameter,D(LS), for proton
NN,POL/DA,N,D	NO	Spin-depolarization parameter, for neutron
NN,POL/DA,P,D	NO	Spin-depolarization parameter, for proton
SL,POL/DA,N,D	NO	Spin-rotation parameter,D(SL), for neutron
SL,POL/DA,P,D	NO	Spin-rotation parameter,D(SL), for proton
SS,POL/DA,N,D	NO	Spin-rotation parameter,D(SS), for neutron

SS , POL/DA , P , D	NO	Spin-rotation parameter,D(SS) , for proton
LL , POL/DA , , K	NO	Spin-transfer parameter, K(LL)
LS , POL/DA , , K	NO	Spin-transfer parameter, K(LS)
NN , POL/DA , , K	NO	Spin-transfer parameter, K(NN)
SL , POL/DA , , K	NO	Spin-transfer parameter, K(SL)
SS , POL/DA , , K	NO	Spin-transfer parameter, K(SS)
NN , POL/DA , RCL , K	NO	Spin-transfer param. , K(NN) , for recoil nucl.
LL/PAR , POL/DA , , K	NO	Spin-transfer parameter, K(LL) , partl. reaction
LS/PAR , POL/DA , , K	NO	Spin-transfer parameter, K(LS) , partl. reaction
NN/PAR , POL/DA , , K	NO	Spin-transfer param. , K(NN) , for partl. reaction
SL/PAR , POL/DA , , K	NO	Spin-transfer parameter, K(SL) , partl. reaction
SS/PAR , POL/DA , , K	NO	Spin-transfer param, K(SS) , for partl. reaction
, POL/DA , , SRF	NO	Spin rotation function, Q
NN , POL/DA , , SF	NO	Spin-flip probability, S(nn)
NN/PAR , POL/DA , , SF	NO	Spin-flip probability, S(nn) , partial reaction
20 , POL/DA , , TAP	NO	Tensor analyzing power, T(20) , spherical coord.
21 , POL/DA , , TAP	NO	Tensor analyzing power, T(21) , spherical coord.
22 , POL/DA , , TAP	NO	Tensor analyzing power, T(22) , spherical coord.
20 /PAR , POL/DA , , TAP	NO	Tensor anal.power,T(20),spherical coord. , partl.
21 /PAR , POL/DA , , TAP	NO	Tensor anal.power,T(21),spherical coord. , partl.
22 /PAR , POL/DA , , TAP	NO	Tensor anal.power,T(22),spherical coord. , partl.
PAR/20 , POL/DA , , TAP	NO	Partial tensor anal.power T(20) , spher. coord.
PAR/21 , POL/DA , , TAP	NO	Partial tensor anal.power T(21) , spher. coord.
PAR/22 , POL/DA , , TAP	NO	Partial tensor anal.power T(22) , spher. coord.
, POL/DA , , VAP	NO	Vector analyzing power, iT(11),spherical coord.
PAR , POL/DA , , VAP	NO	Partial vector analyzing power,spherical coord.
, POL/DA/DE , , ANA	NO	Analyzing power/dE
, POL/DA/DE , N , ANA	NO	Analyzing power dA/dE for neutrons
, POL/DA/DE , P , ANA	NO	Analyzing power dA/dE for protons
, POL/DA/DE , P/P , ANA	NO	Analyzing power dA/dE for proton pair
NN , POL/DA/DE , , SF	NO	Double diff. spin-flip prob.d/dA/dE , S(nn)
, POL/DA/DA/DE , , ANA	NO	Analyzing power DA1/DA2/dE1 for 2 particles
, POL/DA/DA/DE , P , ANA	NO	Analyzing power DA1/DA2/dE1 for 2 protons
PAR , POL/DA/DA/DE , , ANA	NO	Partial anal.power DA1/DA2/dE1 for 2 particles