WP2009-23

Level Density Compilation since the last meeting (Action A40, A41, A57)

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A40: Assess and add to Dictionary 23 an appropriate description of the level density extraction methods

In addition to PGS and PES which were already CP-D/512 before the last meeting, a new method code ERCSN (extraction by Ericson fluctuation) was proposed with a short description of this method in Memo CP-D/558. This code will be added soon.

A41: Add level density (LD) to Dictionary 32 (SF6):

Done.

A57: Compile level densities, as described in revised Memo CP-D/512:

Progress in compilation of level density is summarized below. All articles listed in WP2008-09 have been compiled by NEA-DB.

Reference	Institute	Entry
A. Schiller et al., Phys. Rev. C63, 021306(R) (2001):	2NOROSL	O1670
E. Melby <i>et al.</i> , Phys. Rev. C 63 , 044309 (2001):	2NOROSL	O1446
S. Siem <i>et al.</i> , Phys. Rev. C 65 , 044318 (2002):	2NOROSL	O1701
M. Guttormsen et al., Phys. Rev. C68, 064306 (2003):	2NOROSL	O1702
A. Schiller et al., Phys. Rev. C68, 054326 (2003):	2NOROSL	O1669
U. Agvaanluvsan et al., Phys. Rev. C70, 054611 (2004)	2NOROSL	O0824
R. Chankova et al., Phys. Rev. C73, 034311 (2006)	2NOROSL	O1671
A.C. Larsen et al., Phys. Rev. C 73, 064301 (2006)	2NOROSL	O1699

Recently level densities derived from energy spectrum in (p,n) reactions were published in B.V.Zhuravlev *et al.*, INDC(NDS)-0554 (2009). These level densities were also compiled in D0526 and transmitted in PRELIM.D067. Some differential cross sections used by Zhuravlev *et al.* are missing in EXFOR and will be compiled by NDS:

Reference	Institute	Entry
B.V.Zhuravlev et al., Yad. Fiz. 69, 387 (2006)	4RUSFEI	Compile*
B.V.Zhuravlev <i>et al.</i> , Izv. Akad. Nauk, Ser. Fiz. 63 ,148 (1999)	4RUSFEI	Compile!
B.V.Zhuravlev <i>et al.</i> , Yad. Fiz. 51 , 311 (1990)	4RUSFEI	Compile !

*: Differential data (except 122 Sn(p,n) 122 Sb) are compiled in D0522.