B(E2)/B(M1)(W.u) related issues

M. Shamsuzzoha Basunia, LBNL

ENSDF session

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Facts and Questions:

- rpt/err files - important to check and follow
- In ruler.prob/ruler.prt
  - Example: One simple case

193PB L 5060.6+X 9 (47/2+) 0.23 PS 3 U
EG=291.6 4
Discrepancies with RUL on new record:
BM1W=2.6 4 exceeds RUL(IV)=2 by 1 to 2 sigma

>>>>>>> Warning: BM1W=2.64 +42-33 exceeds RUL=2 (JAVA-RULER)

Question:
At what level of discrepancy – one should pay attention?

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RUL:

NUCLEAR DATA SHEETS

GENERAL POLICIES - Presentation of Data

	Γ_γ/Γ_W (Upper Limit)		
Character*	A=6–44[a§]	A=45–150[b,c]	A>150[d]
E1 (IV)	0.3#	0.01	0.01
E2 (IS)[e]	100	300	1000
E3	100	100	100
E4	100	100†	
M1 (IV)	10	3	2
M2 (IV)	3	1	1
M3 (IV)	10	10	10
M4		30	10

* 'IV' and 'IS' stand for isovector and isoscalar
† Γ_γ/Γ_w(Upper Limit)=30 for A=90–150
# Γ_γ/Γ_w(Upper Limit)=0.1 for A=21–44
§ Γ_γ/Γ_w(Upper Limit)=0.003 for E1 (IS),
10 for E2 (IV), 0.03 for M1 (IS), 0.1 for M2 (IS)

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Facts and Questions:

- B(E2)(W.u) from RULER/JAVA-RULER
- In older evaluations – sometimes listed from measured BE2UP (Coulomb Excitation) value
  - Is there a reason to list from measured BE2UP value?
  - Which one is preferred (if similar or different)?

Adopted Levels, Gammas (continued)

$\gamma(^{186}W)$

E(level)	Eγ‡	Iγ‡	Mult.†	δ†	α	Comments
122.630	122.64 *2*	100	E2		1.81	B(E2)(W.u.)=111.0 *19*. B(E2)(W.u.): from measured B(E2).

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