#### **ENDF Formats and Manual Updates**

David Brown



a passion for discovery



## **Errors/Typos**

#### 6 errors/typos were opened in FY15, I've fixed all but one

ID	Summary	Status
	Typo in equation for photon production	
947	yield	Closed
950	Incoherent scattering in chapter 27	Open
958	Typo in eq. D.85	Closed
	Typo in text Chap. 2 page 86 6 lines	
959	after Eq.(2.6)	Closed
952	Incorrect description of MT=546	Closed
955	Typo in 2.4.18.3	Closed
		1

#### Improvements

I updated the constants in appendix H

	ID	Summary	Status
	834	Add MLBW angular distribution discussion	Open
	939	Codes and Formats Subcommittee Leadership list needs updating	Open
	941	Clarify kinematics discussion in appendix E	Open
	0.40	Need new preface for upcoming format manual release to go with new ENDF	
	942	release	Open
	944	Update constants in Appendix H to CODATA 2010	Closed
Broo			BROOKHAVE

# [#941] Kinematics

- G. Hedstrom (LLNL) has provided a replacement for Appendix E
- Do we adopt it?

Relativistic mechanics from a computational point of view

G. W. Hedstrom

Lawrence Livermore National Laboratory, ret.

Draft, 8 June 2015

hed strom 1 @llnl.gov



### **Format changes**

I updated the constants in appendix H and added the fission neutron MF=6 format

nted
nted



# [#707] Line number removal

- Implemented in the manual 4/2015
- Have scheme to fix diffing in GForge and to reject evaluations differing only in line numbering
  - Ramon implementing scheme on test server currently
- What is status in other codes?
  - STAN should work, but I am fighting with it
  - STANEF, PSYCHE, CHECKR untested
  - PREPRO untested
  - Fudge is fine with change
  - NJOY?
  - AMPX?



# Other action item: still need format proposal to define interpolation in Kalbach-Mann data

- ENDF format's rule for interpolating r(E,E') fail to obey 0<=r<=1</li>
- Different labs handle interpolation of r differently
- Requires new interpolation scheme (similar to how covariance on probability distributions needed new approach)

What is status of format proposal?

