

An XML-hierarchical data structure for ENSDF

- Personal initiative to parse ENSDF data sets to: (i) compare with EGAF; (ii) generate RIPL-formatted data sets.
- Interpreted data can also be *translated* into an XML hierarchy.
- Appropriately defined hierarchy is synergistic with GND development @ LLNL and would augment modernisation of the nuclear data infrastructure.
- Task 1 of the NDWG: *Revitalizing the Nuclear Data Pipeline* (Topic Area lead: David Brown, BNL)
- Representative translation of standard one-card (primary) records is available in the lab report: A. M. Hurst, LBNL-1004483 (2016)
<https://publications.lbl.gov/islandora/object/ir%3A1004483>
- Thanks to David Brown (BNL) and Caleb Mattoon for feedback!
- Next steps (format only): (i) Continuation records (already began);
- (ii) Round-trip translation i.e. ENSDF2XML and XML2ENSDF: Python [lxml](#) library provides methods and high-level functionality adept for this task;
- (iii) Comments? Machine Learning methods for data classification?