

# Needs and Contributions to a Future EXFOR

A short presentation to WPEC Subgroup 50 (SG50)

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September 14, 2020



# EXFOR Library is Essential

- Many users at LLNL use the EXFOR library.
- Access by
  - x4i (Dave Brown)
  - nndc or nea web pages
  - reading c4 files
  - reading x4 files(everyone invents their own plotting method!)
- Some of us want to contribute to any new EXFOR library
- Various issues we have now:
  - Missing charged-particle data
  - Problems with EXFOR
    - Units incorrectly transcribed
    - Plots in papers not accurate
    - Final levels often obscure
    - Uncertainty kinds obscure
  - Source documents hard to find
  - Need quality indicators
  - Register of corrections and comments.

# Recommendations

- Public library of source documents (at least within institutions)
- Link new data to new publications (as with ENSDF now)
  - At least a template for data and its uncertainties.
- New data kinds
  - Fission product data : their production and decay
  - Photon-atom scattering data
  - Electron-atom scattering data
- Curate quality of source data
  - Check units, final levels, kinds of uncertainties
  - Linked uncertainties within sub-entries (e.g. angle- or E-dependencies)
  - Register of comments and/or revisions (especially from the authors!)
  - Explicit history of revisions made.
  - A SERIOUS EFFORT !!



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