User Community – USNDP Discussion Forum

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Introductory talk – D.F.Winchell, NNDC

Brookhaven Science Associates U.S. Department of Energy



Purpose

- Increase communication between data network and user community
- Help set direction for future products and modifications
- Find new methods of getting data into the system



USNDP and NSDD

USNDP: U.S. Nuclear Data Program

- Two working groups:
 - Structure and decay data
 - Reaction data
- Task forces: Astrophysics, RIA, Homeland Security, etc.
- Many labs and universities involved: ANL, BNL, LANL, LBL, LLNL, ORNL, TUNL, McMaster
- Funded by DOE
- NSDD: International network of Nuclear Structure and Decay Data evaluators
 - Coordinated by IAEA
 - Responsible for evaluated data in ENSDF

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Nuclear Science References (NSR)

- Bibliographic database containing over 180000 entries
- Approximately 4400 entries added per year
- Over 80 journals scanned on a regular basis
- Most entries indexed by nuclide, reaction, measured quantities, etc.
- Monthly updates to evaluators
- Web access via NNDC, IAEA, LBL, and others





Structure data: ENSDF and XUNDL

- ENSDF: Evaluated structure and decay data for all known nuclides (2929 at present)
 - Adopted data, plus datasets for specific reactions and decay channels
 - International network of evaluators
 - •Published in Nuclear Data Sheets and Nucl.Phys.A
 - •Data from ENSDF is extracted and used in other data products
- XUNDL: Compiled (unevaluated) datasets from recent publications
- Web access to both databases via NNDC, IAEA, and others

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