

WIR SCHAFFEN WISSEN – HEUTE FÜR MORGEN



D. Rochman

General remarks related to the evaluation procedures

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- A short history JEFF-3.3T1
- Basic Rules for JEFF-3.3 (neutron) evaluations
- Examples to avoid: Au and Cd
- Conclusion

A very short history and feedback

- A new set of evaluations were collected to produce JEFF-3.3T0 and T1:
 - T0: February 26, 2016
 - T1: March 1st, 2016
- Change from T0 to T1 was due to a mistake in ^{52}Cr .
- The list of isotopes for T1 was circulated among the CG members in February 2016
- No remarks were received about these choices from the CG and T1 was released.
- Since then, a few comments from the JEFF community were received for:
 - ^{197}Au (JEFF-3.3T1: copy of ENDF/B-VII.1)
 - Cd isotopes (JEFF-3.3T1: copy of ENDF/B-VII.1)
 - natC

- Reminder:
 - Being processable with NJOY
 - All-important channels included,
 - Include in the MF1 the maximum of description,
 - Evaluation from 0 to 200 MeV (at least) in the ENDF-6 format,
 - Include processable covariances.

- If new measurements are included:
 - To be done with an evaluator,
 - Use recent files ENDF files, or original ones,
 - Do not include high quality measurements in an incomplete (old) file

Examples of “old” habits: ^{197}Au and Cd

- ^{197}Au
 - In JEFF-3.2, new measurements from IRMM from 0 to 100 keV,
 - They were included in an existing file, with multiple updates since ENDF/B-VI,
 - The new MF32 can not be processed with existing tools.
- Cd isotopes
 - In JEFF-3.2, new measurements from IRMM
 - They were included in old, incomplete ENDF files (*e.g.* no MF6),
- As a consequence, these files were not kept in JEFF-3.3T1, despite the high quality IRMM data.
- -> lost effort and work, because the evaluation step was improper.
- -> possible additional work and time to rescue these data.

Conclusion

- The evaluation procedure should not be neglected,
 - It can not be done by an experimentalist, or by a specialist on processing, benchmarking...
 - It has to be done by an evaluator,
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- Consequences:
 - Lost of time,
 - Lost of valuable data,
 - Frustration & incomprehention
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- Only one solution: work with evaluators !