

Thoughts on the way CSEWG is functioning

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- How to:
 - improve quality of the evaluations
 - avoid flops
 - maintain and advance library performance
 - better coordinate CSEWG evaluation effort

Mark's thoughts

- **"Primum non nocere"** - like the hippocratic medical ethics oath, i.e., a new evaluation should fit differential experiments better, unless compelling explanations are given that explain why the measured data are wrong.
- Get evaluations through the **checking codes**
- Do **phase 1 reviews**
- **Integral validation** done, and things don't get worse (unless we believe there might be credible explanations)
- Coordinate within CSEWG to **avoid duplication** (duplication may still be allowed where there is an explicit realization that competing methods have value, e.g., LANL and LLNL on PFNS)

My thoughts (software means)

- Impose **Subversion filter** running checking codes that would automatically reject evaluations that do not pass through the checking codes
- Automatically produce a **standard set of plots**, even run NJOY with ace plots and energy balance (still somebody should look at these plots)
- Set up **web application** where evaluators can upload new evaluations and get results of latest checking codes, standard set of plots etc. Actually, for the checking codes such application is already active.

My thoughts (CSEWG actions)

- Request that each new evaluation comes with the **document justifying** its inclusion in ENDF.
- Create list of nuclei for which any submission of substantial changes would **require validation results**.
- **Redesign evaluation sessions** to have it organized by new evaluations, material by material, integrating evaluation with validation in the same (or subsequent) talks. Use validation session for global testing of the library.
- At each CSEWG meeting **review list of deficiencies** and treat it seriously.

More thoughts... (coordination)

- Create **list of materials that are under work** or intended for evaluation so that we are not surprised when new evaluations drop from the sky.
- Have each **evaluation officially approved** by CSEWG in open voting (as we do with the format changes)
- Should we **establish mini-CSEWG** as a regular event?
- Should we have annual beta-release (say each September)
 - would allow validation as we go
 - would stimulate evaluation work
 - would give evaluators good point for reporting

Still more thoughts... (validation)

- Recognize that global validation of the library is not a substitute for **detailed benchmarking** of the new or seriously modified evaluations. Individual testing may show, sometimes unambiguously, whether the change brings improvement and where; global testing might find the problem with the whole library only if the effect is big and even then it is not warranted that we'll know where the problem is.
- Establish official, continuously growing list of **CSEWG benchmarks** with input accessible to CSEWG members.

To be or not be (international)

- International file would certainly put the bar much higher than we have it now.
- Light nuclei certainly pose particular problems and international effort of the type of the CRP could help a lot. The problem is that there aren't many participants capable of taking such a challenge.