^{56}Fe overview and perspectives

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Overview

- Resonance evaluation available and under testing
  - includes some level of assimilation to integral data - we might need a ‘clean’ file for ENDF/A and for assimilating the entire Fe file(s)
  - so far coupled to ENDF/B-VII.1 fast range
    - first results of testing seem to be positive
    - possibility of extending RR up to 2 or even 4 MeV
    - angular distributions from RR
- Evaluation in fast neutron range a month behind the schedule but preparations are in a good point

Overview (cont.)

- New experimental data
  - inelastic measurements at Geel
  - semi-differential measurements at RPI (not yet available)
  - Wallner measurements for 56Fe(n,2n) (not yet available)
  - Ohio inferred inelastic cross sections - could this be?
- Experiment analysis in fast neutron range
  - Great work performed at CNDC (more details in the following presentation)!
- Number of issues to be solved
  - what to do with fluctuations?
  - what to do with angular distributions in the resonance region - are we ready for 10-20 Mb of MF/MT = 4/2?

Perspectives

- Continue testing of the new RR - some results to be presented shortly
- Prepare the β_0 version of the fast range evaluation (including initial validation) for the next WPEC meeting
- Aiming at at least two final files: A - pure differential, B - adjusted; possibly also C (assimilated) or BC if assimilation is within evaluation uncertainties
- Separate covariances for A, B and C including cross reaction correlations