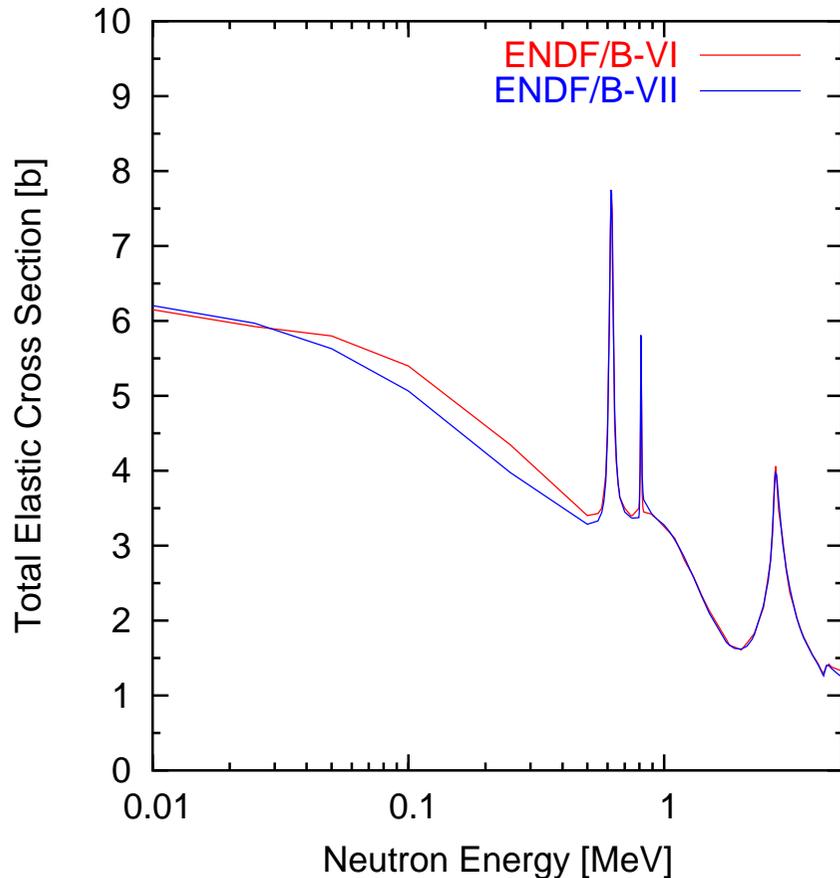
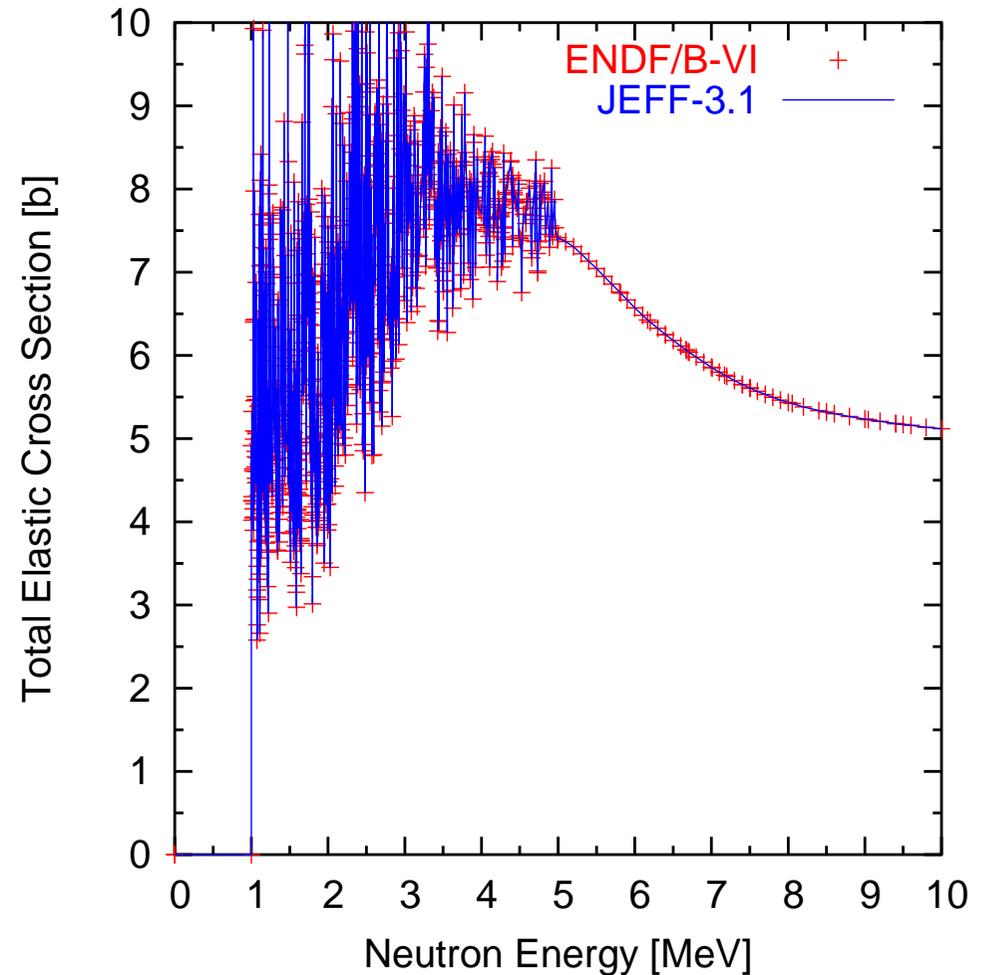
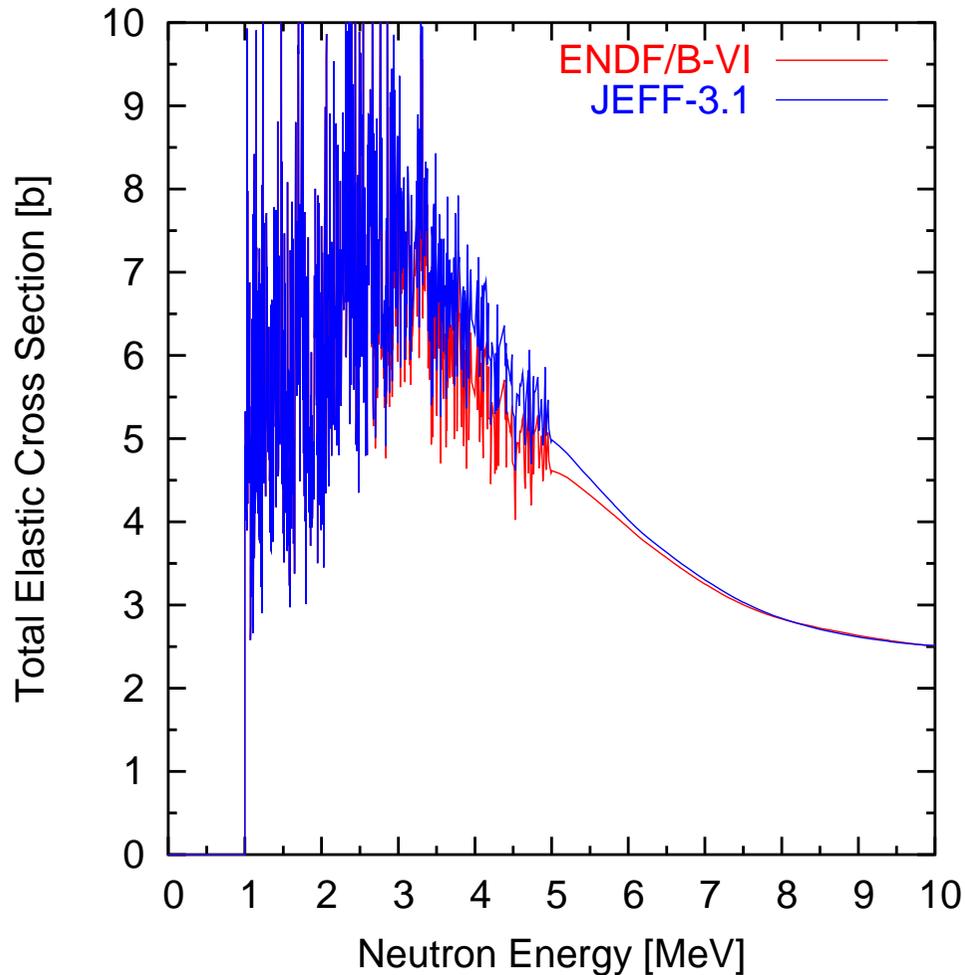


Improvement of k_{eff} Prediction for Be Reflector Cores

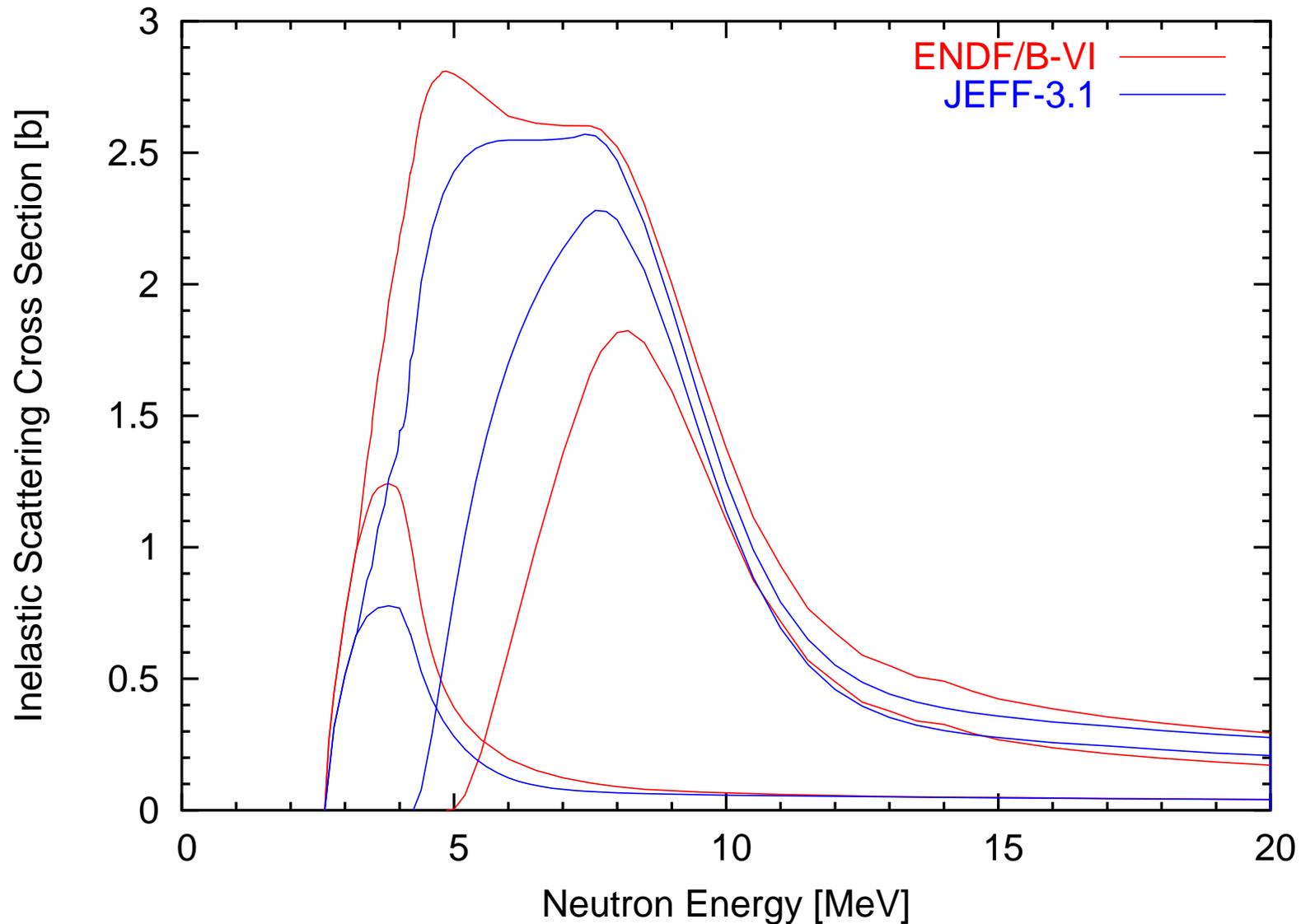


- A bias problem reported for Pu and U cores with Be reflector
- We have investigated this problem by looking at the Be elastic scattering cross section.
- Lower elastic scattering cross section would be better (see R.E.MacFarlane's talk).
- The interim evaluation for ^9Be will be finalized with the R -matrix analysis.

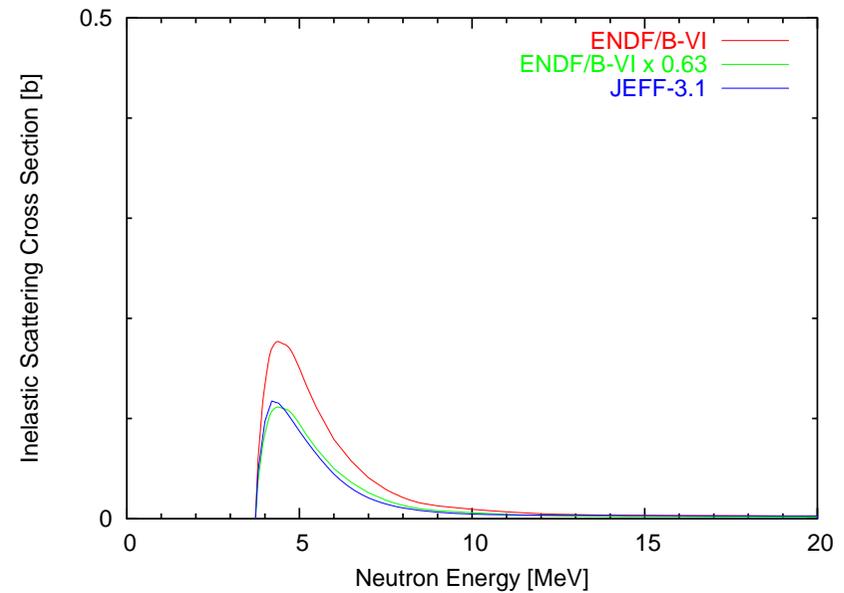
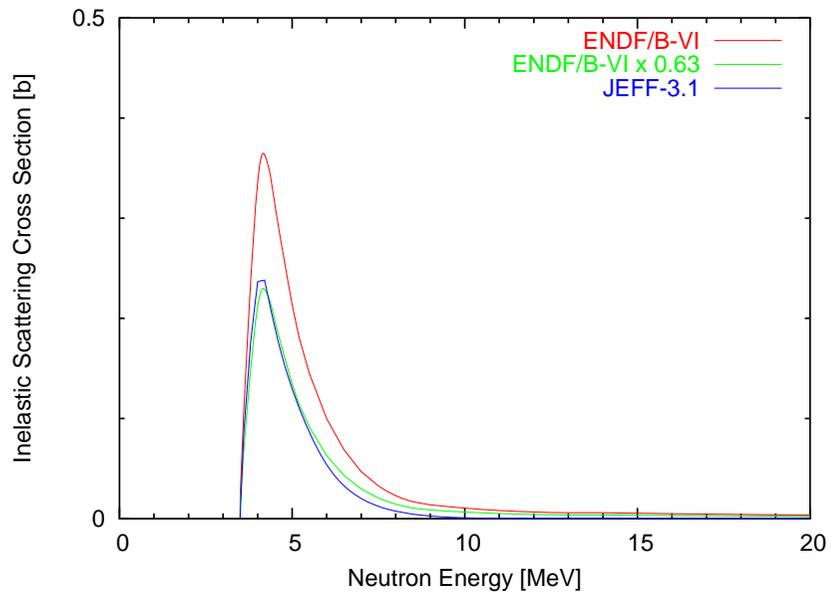
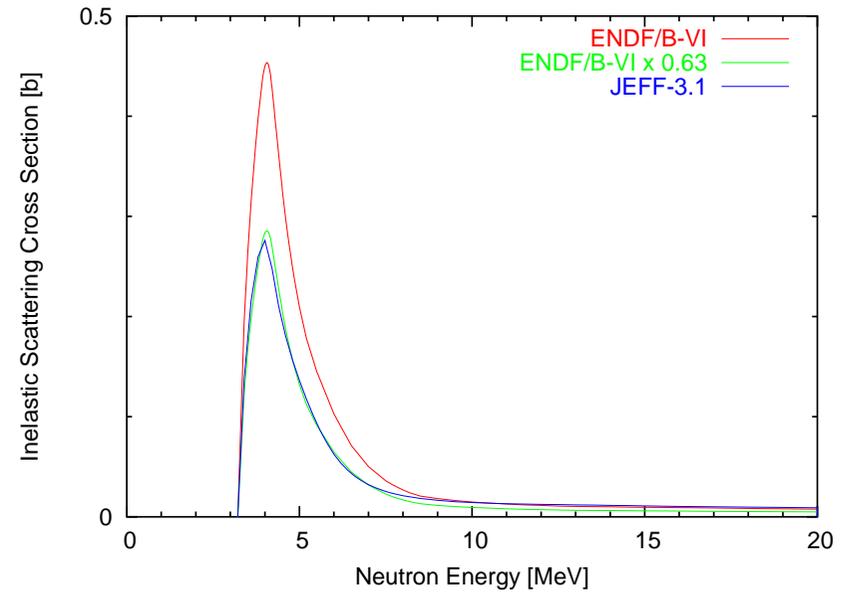
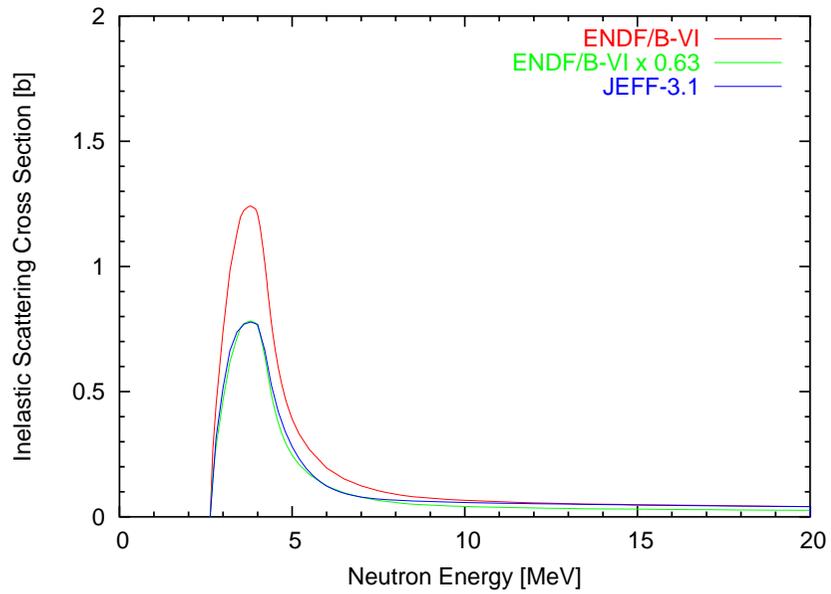
Comparison of Elastic Scattering Cross Section



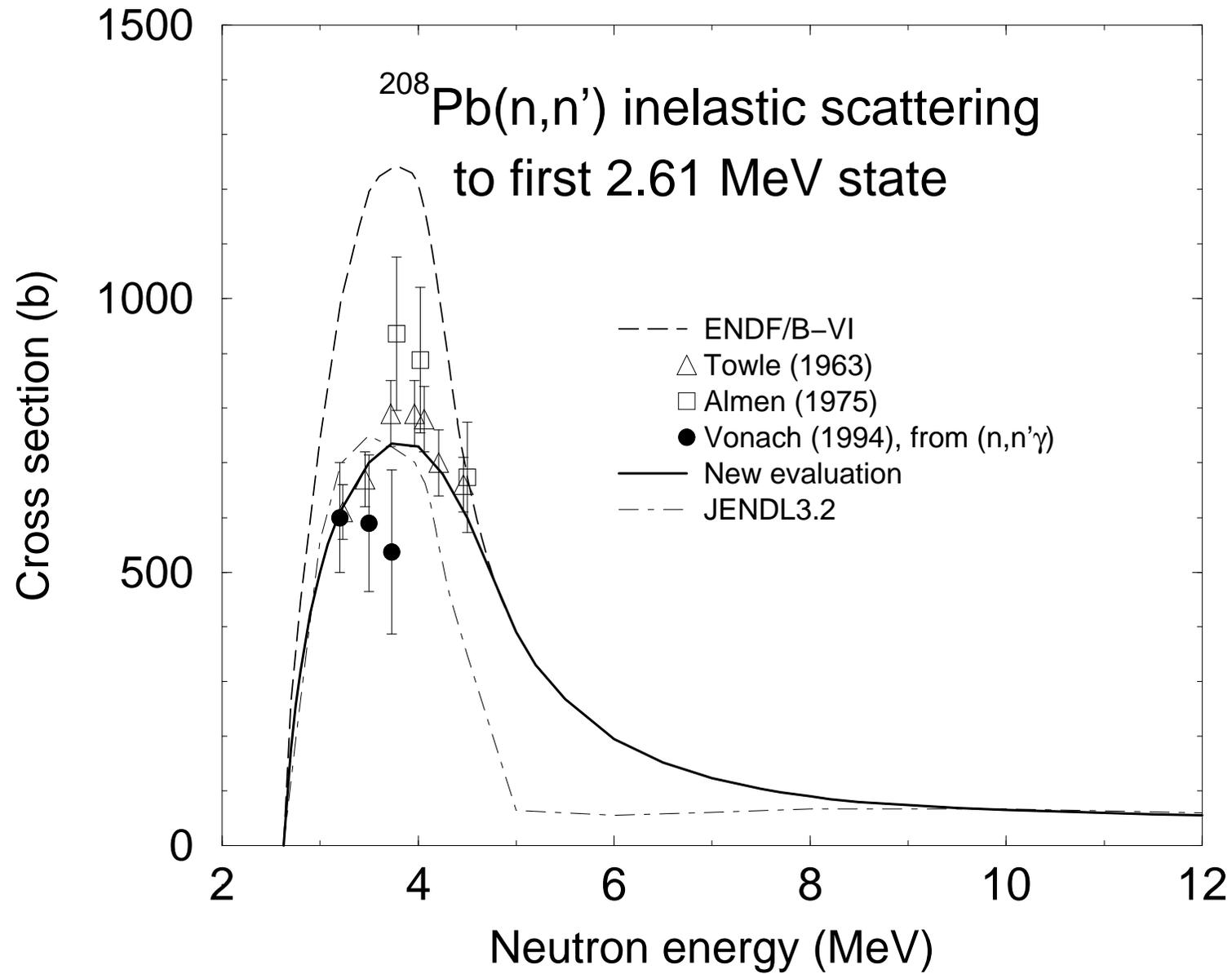
Comparison of Total Inelastic Scattering Cross Section



Level Excitation



Inelastic Scattering to the First Level



Cross Section Evaluation for ^{208}Pb , V

- We made a trial file, which has 50% smaller inelastic scattering cross sections for the first 4 levels, and the reduction was compensated by increase in the total scattering cross sections.
- The file will be tested against the benchmark problems soon.

Covariance Evaluation Works

- Covariance matrices for ^{235}U and ^{239}Pu fission cross sections generated.
 - based on the similar experimental database, but slightly different
 - not for the standard cross sections
 - grouped covariance given for ^{239}Pu
- The covariance of ^{238}U capture cross section has not yet been completed.
- Collaborate with L.Leal to finalize the Gd covariances.
- T. Kawano and M. Herman will work on the Gd covariance data for ENDF/B-VII.