

Guidelines for Mass Chain Reviews

Adopted Levels:

- Consider supporting arguments for Jpi assignments. If not present – ask for them to be provided. If present, confirm assignments are valid. Check if they are over or under constrained.
- Half-lives : if from average, checking averaging. Confirm that source of data is clearly indicated. If T1/2 from transition strength or Level Widths, confirm calculation used Adopted Values.
- Decay modes : if from average, check averaging. Confirm that source of data is clearly indicated.
- Confirm band assignments and check for mis-flagged levels.
- Check validity of configuration assignments and/or suggestion configuration if assignment can be made.

Adopted Gammas:

- Confirm that source of Eg, Ig, Mult, and delta are clearly indicated and values are consistent with indicated source.
- Check transition strengths do not exceed RUL. Also check if transitions strengths are provided for all cases where sufficient data are available to calculate.
- Confirm use of latest version of RULER.

Decay Datasets (excluding SF decay)

- Confirm you can reproduce normalization factor following stated description (if appropriate)
- Confirm you can reproduce beta feedings (if appropriate).
- Confirm you can reproduce alpha feedings coming from intensity balance (if appropriate).
- Confirm any calculations performed by the evaluators, for example, I_{γ} from $I_{\gamma+ce}$ and alpha, or $\%b, \%ec$ from intensities of gamma-rays in the daughters.
- Half-lives : if from average, checking averaging. Confirm that source of data is clearly indicated.

Reaction Datasets (including SF decay)

- Half-lives : if from average, checking averaging. Confirm that source of data is clearly indicated.
- Confirm J_{π} values are as given by author's in main references used to construct dataset.
- Confirm multipolarities are supported by experimental measurements.
- Confirm band assignments and check for mis-flagged levels.

General :

- Check that all recent references have been incorporated or mentioned.
- Read all text – check for typos, grammar, formatting problems (i.e. “b” instead of “ β ” or “142Cs instead of “¹⁴²Cs”).
- Confirm use of uncertainties in NDS style: VALUE UNIT (if needed) UNCERTAINTY IN ITALICS (i.e. 50 ps 5).
- Confirm calculation of delta values from conversion electron measurements – if multiple measurements, suggest use of BrIcc mixing (if not already utilized).