# Review of: "Approximate Relationships to Reproduce the Values of Shell Correction Energy for Fission Fragments"

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Potential competing interests: No potential competing interests to declare.

The purpose of the paper appears to be to take tabulated data of shell correction energies (from the cited Myers & Swiatecki report [29]) for a series of specific fission fragment distributions, and to replace the data points by piecewise linear fits. Such a technique can be useful in nuclear data evaluations where a modest data reduction then takes place and a database can not only have its individual data points replaced by a function evaluation, but missing data points can be interpolated.

As such, the paper and method have a use and are worth publishing. Ideally, if it is going to serve as part of a useful evaluation, it needs to be extended to all available data. It is not predictive, and each set of empirical data needs to be assembled and the piecewise linear fit made. Possibly the method could be married with detailed microscopic calculations to make predictive fits, but this would be a new project.

As others have commented, seeing the piecewise linear functions superimposed over the data would be helpful.

The English is not always very easy to parse, but understandable enough to know what is going on.