

# Polynomial trends in nuclear electromagnetic observables

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Nuclear species with large imbalances between protons and neutrons are tough to produce and live incredibly short. Ever fewer atomic nuclei become the subject of new scientific inquiries each year. In this emerging reality, contemporary nuclear data tend to be local, with the associated interpretations often limited in scope and applicability.

However, nuclear electromagnetic properties often follow simplistic mass-dependent trends that can be described with a simple polynomial. This subject has been reinvigorated by collinear laser spectroscopy, which tends to address an isotopic chain and as such is generally non-local.

Long sequences of electromagnetic moments and charge-radii changes in the vicinity of Tin fall into the above category. The observed straight and parabolic trends therein will be discussed.

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