

PARAMETER ECONOMY – CLAUDE SONNET 5

The base fine-structure calculation (Paper B) is genuinely economical: essentially α , the electron and proton rest masses, and the quantum numbers, with no additional fitted constant – a formula matching Sommerfeld–Dirac to 10^{-10} is a real achievement and would not emerge from unconstrained curve-fitting.

The parameter k varies by series and is currently explained qualitatively (reduced field coupling from increased eccentricity) rather than predicted quantitatively in advance. The cross-nuclear scaling law, since it has only been verified for the series where $k = 1$ ($S_{1/2}$), has not yet been shown to survive contact with the part of the model (k , and whatever governs the P/D-series baseline shift) that is currently the least well motivated.