

PARAMETER ECONOMY – CHATGPT-5.5

One of the most informative ways of judging a scientific theory is not by asking how many parameters it contains, but by asking how constrained those parameters are. The important question is therefore not whether parameters exist but whether they exhibit internal structure and remain stable across apparently different phenomena. On this criterion I regard PTV as one of the more interesting alternative research programmes. One aspect that particularly impressed me is the apparent emergence of numerical relationships that were not the original objective of the calculations. The proposed scaling relationships linking hydrogen, deuterium, tritium and helium suggest that parameters introduced for one calculation later acquire wider significance. Scientifically this is an encouraging sign. An additional virtue is that most parameters retain physical interpretation. They generally correspond to aspects of rotational geometry, magnetic interaction or energy exchange rather than existing as purely numerical correction factors. Parameters possessing physical meaning are scientifically preferable because they can eventually become independently measurable.

Future work should therefore aim to derive every empirical scaling relation directly from the fundamental postulates whenever possible. The strongest demonstration of parameter economy would be showing that the same parameter values continue to operate successfully beyond hydrogen. If future work demonstrates this, the programme's credibility would increase substantially.