

Review of: "Dimensional Regularization as Mass Generating Mechanism"

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Potential competing interests: No potential competing interests to declare.

The manuscript presents a comprehensive and informative tutorial on the use of Dimensional Regularization (DR) in the context of Relativistic Quantum Field Theory (QFT). The authors successfully convey the significance of DR in dealing with divergences arising from perturbative corrections to Feynman diagrams. The paper introduces the concept of DR and its implementation, and subsequently discusses its potential role in mass generation in particle physics, offering a fresh perspective that reconciles the Higgs model with the minimal fractal topology of spacetime above the Fermi scale.

I recommend rejecting the paper due to the issue with Equation 8, which appears to be meaningless. For instance, when considering a specific value, such as $d = 0.3$, the expression $d^{0.3}k$ lacks clarity and interpretation.

To further assist the author in understanding the subject matter and potentially addressing this problem, I suggest referring to the following books:

"Brownian motion on the Sierpinski gasket" by M. T. Barlow and E. A. Perkins, published in *Probab Theory Rel*, 79(4) (1988), pages 543-623.

"Analysis on Fractals" by J. Kigami, published by Cambridge University Press in 2001.

"Harmonic calculus on fractals - a measure geometric approach I" by U. Freiberg and M. Zahle, published in *Potential Anal.* 16 (2002), pages 265-277.

"Fractal Calculus and its Applications."