

## Review of: "Dark Matter as Dimensional Condensate"

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Potential competing interests: No potential competing interests to declare.

The manuscript exhibits a commendable level of descriptive clarity and maintains a well-structured composition. Its content displays promise for potential inclusion in the Qeios Journal. However, prior to reaching a conclusive decision on acceptance, I would like to address several queries that have arisen in relation to this study, as outlined below:

- 1. In this context, the author has opted to employ the closed form of fractional differential operators alongside q-deformed algebras within the framework of power law functions. It prompts the question of whether alternative closed-form functional expressions could potentially exist, or if the utilization of the power law functional form is singularly optimal for investigating this particular scenario from a mathematical standpoint.
- 2. Within the realm of late-time cosmology, an intriguing avenue to explore revolves around the potential interaction between two enigmatic entities: Dark Matter and Dark Energy. Should the author choose to incorporate the framework of an interacting Dark Energy-Dark Matter scenario, a pertinent question arises: how might the introduction of such interaction manifest as changes within the dimensional condensate under scrutiny?
- 3. Within the ambit of the unification of Dark Matter (DM) and Dark Energy (DE), an apparent paucity of citations has been noted. In order to bring the author's attention to pertinent sources that can enrich this discourse, a selection of crucial references is hereby provided: (i) Eur. Phys. J. Plus \textbf{137} (2022) no.11, 1271, (ii) arXiv:2305.19062 [gr-qc], (iii) JCAP 1111 (2011) 016, (iv) JCAP 1311, 025 (2013)

If the authors can clarify these points, then I believe the paper can proceed to publication and I do not need to see it again.

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