Review of: "Generalized N-metric Spaces"

Carlo Cafaro[1]

1 SUNY Polytechnic Institute

Potential competing interests: No potential competing interests to declare.

General comments

In this paper, the authors introduced the notion of generalized N−metric spaces. This definition was inspired by the idea of path integral in physics. Several cases for different values of N are checked in an explicit manner, mostly giving strong hints to be generalized N−metric spaces. Finally, some open questions are proposed by the two authors.

It seems to be a short and interesting paper. I would suggest elaborating on the similarity with path integration that has generated the idea of generalized metric space. Perhaps, one may ask, what is the “analogue” of the triangular inequality in path integration?

I would suggest accepting the paper once the following points are properly taken into consideration.

Specific comments

1. Page 1: Why is N3 a generalization of triangular inequality for a standard metric space? Please, elaborate on this point.
2. Page 2: I would suggest the authors describe a bit more how they have introduced the notion of generalized N−metric spaces taking inspiration from the idea of path integral in physics. Perhaps, a simple Table where they compare path integral notions in physics and generalized metric spaces notions can help the reader.
3. Page 2:…h-bar the Planck’s constant…→…h-bar the Planck reduced constant…
4. Page 2, last line: Please, N_1, N_2, and N_3 should appear in bold font.
5. Page 3: Please, describe how you obtained the specified numbers of permutations and, in addition, how you checked the absence of contradictions in these proposed scenarios.