Review of: "Graded Quantum Noise in Quantum Field Theories"

Hossein Ghaffarnejad[1]

1 Physics, Semnan University, Iran, Islamic Republic of

Potential competing interests: No potential competing interests to declare.

Dear author, I read your work and found it very useful in the field of stochastic quantum noisy systems. I also looked at the comments of previous reviewers. Hence, to improve and extend the work, I suggest adding some applicable examples, for instance, in quantum cosmology and/or quantum black holes related to the subject given in section 10, in which you investigated the effects of noise in quantum gravity. For instance, what are the effects of noise fields on the cosmic censorship hypothesis? What are the noise field effects on the Hawking radiation of a quantum black hole? Are they able to prevent the horizon from evaporating and shrinking, and does the shadow of the hole not eventually lead to a naked singularity? What are the effects of noise fields on the one e-folding parameter in cosmic inflation (say, chaotic type)? Can they improve or worsen the inflation rate? Another of my suggestions is the investigation of the noise fields on the non-local quantum potential, which is proposed in deterministic Bohmian quantum mechanics. Because the latter model of QM is a statistical approach where hidden variables are present, I believe that more readers will be drawn to your work. In fact, this version of the work is from a pure mathematical perspective. Typographical errors should be fixed too (see, for instance, `nojsy` line 4, section 1). Sincerely yours,