Review of: "Philosophical Aspects of Time in Modern Physics"

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The presented article is a solid work on the exciting topic; nonetheless, the author missed two very important points.

First, the question of whether or not spacetime is fundamentally discrete ('granular') remains uncertain. Numerous proposals have suggested that space and time should be discrete; yet, none have been definitive (see, for example, Sabine Hossenfelder. Minimal Length Scale Scenarios for Quantum Gravity. *Living Reviews in Relativity*. 16 (1): 2, 2013).

More importantly, though, a spacetime granularity implies the existence of a minimal scale (i.e., the Planck scale) which is encoded in a generalized uncertainty principle (GUP). However, the last dynamically violates the equivalence principle, the postulate of general relativity. In this way, a spacetime granularity contradicts general relativity (see details in Abdel Tawfik and Abdel Diab. Generalized Uncertainty Principle: Approaches and Applications. *Int. J. Mod. Phys. D*23, 1430025, 2014).

Second, speaking of time in modern physics, one cannot overlook the problem of time in canonical quantization. The most obvious manifestation of this problem is that the Wheeler-DeWitt equation makes no reference to time; even so, this is normally regarded as the crucial 'dynamical' equation describing the quantum state of the entire universe (see Chris Isham. Structural Issues in Quantum Gravity. arXiv:gr-qc/9510063).