

Abstract Submitted
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The classical – quantum border at 10^{11} Hz and Cosmic Microwave Background SIMON BERKOVICH, George Washington University — Findings of non-trivial anisotropy of CMB challenge current cosmology. Notably, this has been predicted by our model of the Universe – a cellular automaton with a rule of distributed fault-tolerant synchronization (<http://arxiv.org/abs/astro-ph/0509743>). This model yields spectrum of elementary ‘quasi-particles’ and fast operational background: ‘action-at-the-distance’ for gravitation, underlying mechanism for Bohm-Hiley’s interpretation of quantum phenomena and holographic reference waves for biological information. Matter creation is accompanied with ‘shock wave’ and synchronization-desynchronization undulations of 10^{-11} sec that form CMB. Its structurization is due to eccentric observation, the 2.72^0K ‘temperature’ of black body spectrum is indicative of 10^{11} frequency. Quantum strangeness stems from multiplexing of synchronized and desynchronized stages resulting in sophisticated behavior at the former and loose motion at the latter. The relative stage durations are determined by placing in the Universe, and propagation front may impact large molecules depending on their orientation. Quantum and Life mysteries being interrelated, both can be affected by the border frequency. Millimeter waves cause biological effects neither by heating nor direct action, but as a trigger. Mesoscopic quantum phenomena, like, e.g. superconductivity, can be destroyed by 10^{11} Hz. Thus, there is a possibility for a 10^{11} Hz threshold in disrupting quantum entanglement through the suggested multiplexed machinery.

Simon Berkovich
George Washington University

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