Review of: "On the cosmological arrow of time"

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The Author starts from an unorthodox cosmological model, based on an original idea by Wetterich, in which the cosmological redshift would derive from the increase in particle mass over time, to ask himself how the arrow of time can be interpreted in this alternative framework. The assumption is that the set of minima in the effective potential of a symmetry-broken quantum field theory should represent physically coexisting ground states. The tunneling of the energy transported by the instantons within the set of fundamental states should induce the change in the masses of the particles. The directionality in which the energy of the instanton flows, passing from the fundamental states with high energy density to those with low energy density, would therefore define the cosmological arrow of time. It is stressed that the assumption on which this work is based, that the set of fundamental states physically coexists, would not be viable if it were not possible to give a valid argument regarding the increase of entropy within a contracting spacetime . Otherwise, the second law of thermodynamics would be violated.The article is certainly speculative and unorthodox, but I find the approach used to address the problem to be original and interesting. I believe that the manuscript deserves to be disseminated within the scientific community and therefore I recommend its publication.