Contributed Talk

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Title: Entanglement Entropy at Critical Points in the Multiverse

Abstract: Recently the entanglement entropy between universes has been calculated, an entropy which somehow describes the quantumness of a homogeneous multiverse. The third quantization formalism of canonical quantum gravity is used here. I will show improvements of the results in a more general scenario, studying what happens at critical points of the evolution of a classical universe. We infer the relation of that entanglement entropy with the Hubble parameter of single universes.