



Contribution ID: 119

Type: parallel

Universe's memory and spontaneous coherence in loop quantum cosmology

Monday, 12 September 2016 17:25 (25 minutes)

The quantum bounce a priori connects several (semi)classical epochs of Universe evolution, however determining if and how well the semiclassicality is preserved in this transition is highly nontrivial. We review the present state of knowledge in that regards in the isotropic sector of loop quantum cosmology. This knowledge is next extended by studies of an isotropic universe admitting positive cosmological constant (featuring an infinite chain of large Universe epochs). It is also shown, that such universe always admits a semiclassical epoch thanks to spontaneous coherence, provided it is semiclassical in certain constant of motion playing the role of energy.

Summary

Primary author: PAWLOWSKI, Tomasz (Center for Theoretical Physics, Polish Academy of Science)

Presenter: PAWLOWSKI, Tomasz (Center for Theoretical Physics, Polish Academy of Science)

Session Classification: [QC] Quantum gravity and cosmology