

The Big Bang and the Big Crunch: A New Approach to the Evolutionary Entropy

[M. D. Karp](#), [Francesco Fasin](#), [Pasquale Liguori](#), [Michele Coppolecchia](#)

Abstract

The Big Bang can be interpreted as a period of evolution of the universe after the Big Crunch. This period of evolution is characterized by the emergence of entropy and the creation of a universe of primordial black holes. At the end of the Big Bang, the entropy of the universe becomes dominated by the classical zero-temperature theory of the Big Bang and its Big Crunch. The evolution of the entropy can be characterised by a two-step process: (i) The Big Bang is followed by a period of the evolution of entropy and (ii) The Big Crunch is followed by a period of the evolution of entropy. We provide a new approach to the evolution of entropy using the Big Bang and Big Crunch models, which allows us to interpret the Big Bang as a period of the evolution of entropy at the end of the Big Crunch. This is a much simpler and more direct way to interpret the Big Bang and Big Crunch as periods of the evolution of entropy at the end of the Big Crunch.