

Quantum FRW Cosmology with an axion-like field.

We consider the Wheeler-DeWitt equation for FRW cosmology with an axion-like field. We interpret this scalar as time by means of a conditional probability. It follows that at the initial time, depending on the initial conditions, the positivity of the scale factor and quantum fluctuations lead to a minimum size of the universe. Further, we explore the boundary conditions for the wave function of the universe under the requirements of early inflation, and the classical character of the present universe.