General Relativity and Quantum Cosmology

Inflation and the cosmological constant

F. R. Klinkhamer

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A particular compensation-type solution of the main cosmological constant problem has been proposed recently, with two massless vector fields dynamically canceling an arbitrary cosmological constant \Lambda. The naive expectation is that such a compensation mechanism does not allow for the existence of an inflationary phase in the very early Universe. However, it is shown that certain initial boundary conditions on the vector fields can in fact give rise to an inflationary phase.

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