Inflationary supersymmetric FRLW quantum cosmology

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We consider inflationary scenarios of the supersymmetric quantum cosmology of FRLW models with a scalar field. We use the superfield formalism with a superpotential for the scalar superfield. From the probability amplitude solution of the supersymmetric Wheeler-DeWitt equation, we compute an effective probability density from which we get mean trajectories that are parametrized by the scalar. We analyse several superpotentials, for which the resulting evolutions of the scale factor are consistent with inflationary scenarios. For these cases, we show the acceleration, the $e$-folds and the horizon.

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