

Early Universe Cosmology and Inflation

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The study of the creation of our universe and evolution of it, is quite intriguing and challenging thing. Now cosmological inflation is a theory proposed by Alan Guth in 1980 which tried to answer some troubling questions related to the known cosmology. In next few years it has been realized that cosmological inflation is a theory which is related to many other things than its initial motivations. Through the last three decades different kinds of inflation models are being proposed mostly motivated by Particle Physics models such as Standard model, Supersymmetry, Extra dimensions etc. In this presentation I will go through the recent developments in inflation physics with different constraints coming from high energy physics experiments and other observations. I would also emphasis on a particular genre which is known as the warm inflation. Warm inflation is a different kind of model from mostly known models as it does not need a reheating phase after the inflation ends.