Title:	Models to solve the problems associated with the hot big Bang Model
Authors:	G, Rishi Gangadhar. (/jspui/browse?type=author&value=G%2C+Rishi+Gangadhar.)
Keywords:	Models Problems Hot Big Bang
Issue Date:	28-Jul-2021
Publisher:	IISERM
Abstract:	In this thesis we discuss about the problems with the hot big bang model of cosmology and models that attempt to solve them. We will then discuss the idea of inflation – an era of exponential expansion of the universe, and why our universe required an epoch of acceler- ated expansion. After discussing about the matter fields which could have driven inflation in the beginning of the radiation dominated epoch, we establish the conditions under which inflation can occur. Apart from this, theory of inflation naturally provides a theoretical basis to the inhomogeneities observed in the Cosmic Microwave Background (CMB) radiation that we observe today. After discussing the theory of cosmological perturbations in detail, we show the methods to calculate the power spectrum corresponding to the comoving cur- vature. Finally, we will discuss about regularized big bang models and why these models come into picture. Afterwards we will discuss about two such models and check whether they solve the problem of singularity in the case of a closed universe.
URI:	http://hdl.handle.net/123456789/3872 (http://hdl.handle.net/123456789/3872)
Appears in Collections:	MS-16 (/jspui/handle/123456789/3766)

Files in This Item:

File	Description	Size	Format	
Rishi (MS16127)_Thesis.pdf (/jspui/bitstream/123456789/3872/3/Rishi%20%28MS16127%29_Thesis.pdf)		805.94 kB	Adobe PDF	View/Open (/jspui/bitstream/123

Show full item record (/jspui/handle/123456789/3872?mode=full)
(/jspui/handle/123456789/3872/statistics)