



ICTS Seminar

- Title : Power and bi-spectra of secondary GWs from ultra slow roll inflation.
- Speaker : Ragavendra HV (Indian Institute of Technology, Madras)
- Date : Wednesday, 13th January 2021
- Time : 02:00 pm (IST)
- Abstract : This talk is based on my two recent papers. Inflationary models permitting ultra slow roll evolution produce considerable population of primordial black holes (PBHs) and significant amplitudes of secondary gravitational waves (GWs). These GWs arise from the second order tensor perturbations sourced by the enhanced first order scalar perturbations. In this talk, I will discuss specific models and reconstructions of ultra slow roll inflation that generate detectable amplitudes of GWs [arXiv:2008.12202 [astro-ph.CO]]. Particularly, I will focus on the effect of scalar non-Gaussianity on the generation of secondary GWs. In this context, I shall contrast ultra slow roll models against an alternative method of evolving perturbations with squeezed initial states [arXiv:2011.09938 [astro-ph.CO]]. I will also discuss the features in the shape function of the secondary tensor bispectrum in our models. I shall conclude with a summary and outlook of the results.
- Venue : Please click on the below link to join the seminar
<https://zoom.us/j/93923036444?pwd=Q0k0N1ZLU3J1UEZDT3ppSm8rc3ZVZz09>
Meeting ID: 939 2303 6444
Passcode: 532014