## 10th International Conference on Gravitation and Cosmology: New Horizons and Singularities in Gravity (ICGC 2023)



Contribution ID: 314

Type: Oral

## Gravitational Waves Background from Quintessential Inflation and NANOGrav data

In this talk ,I will discuss about the process of induced gravity waves due to large scalar fluctuations in the paradigm of quintessential inflation. Numerically solved the Mukhanov-Sasaki equation for different sets of parameters are used to obtain the power spectra. It is been demonstrated that the induced gravity wave signal generated in this framework can falls within the region of the NANOGrav data for the chosen values of model parameters. There is an allowed region of parameter space where the effect shifts to high frequency regime relevant to LISA and other available sensitivities.

## Email

nurphoton@gmail.com

## Affiliation

Indian Institute of Science Education and Research Kolkata

Authors: Ms DAS, Barnali (IISER KOlkata); Mr JAMAN, NUR (IISER KOlkata); Prof. SAMI, M (SGT University)

Presenter: Mr JAMAN, NUR (IISER KOlkata)

Session Classification: Cosmology

Track Classification: Cosmology