

Workshop 2

Cosmology

December 10, 2019

Session Chairs :

Surhud More (surhud@iucaa.in)

Nishikanta Khandai (nkhandai@niser.ac.in)

Time	Speaker	Title
16:00 – 16:30	CS Unnikrishnan	Modified General Relativity Anchored on Cosmological Basis and the Centenary Einstein Equations
16:30 – 16:45	Sharvari Nadkarni-Ghosh	One-point PDF of the density field from spherical dynamics: Early dark energy vs. LCDM.
16:45-17:00	Chetan Bavdhankar	Towards the Local Group Dipole measurement with Supernova type Ia
17:00-17:15	Saugata Barat	Modeling Gravitational Wave Sources at High Redshifts: The X-ray Counterpart
17:15-17:30	Sayantani Bera	Constraining the Hubble parameter with galaxy-binary black hole cross-correlation measurements
17:30-17:45	Divya Rana	Weak lensing analysis of gamma groups using Subaru HSC
17:45-18:00	Amit Kumar	weak lensing around satellite galaxies in a galaxy cluster

December 11, 2019

Session Chairs :

Surhud More (surhud@iucaa.in)

Nishikanta Khandai (nkhandai@niser.ac.in)

Time	Speaker	Title
14:00-14:15	Ankan Mukherjee	Constraining the dark energy statefinder hierarchy in a kinematic approach
14:15 -14:30	Archita Bhattacharyya	Constraining Dark Energy Perturbations: the Role of Early Dark Energy
14:30 – 14:45	Srijita Sinha	Density perturbation in an interacting holographic dark energy model
14:45-15:00	Ranbir Sharma	Reconstruction of Late time cosmology using Principal Component Analysis
15:00-15:15	Vipin Sharma	Effects of modified $f(R)$ gravity in galactic rotation and lensing profiles

16:00 -16:15	Atrideb Chatterjee	Ruling out 3 keV warm dark matter using 21 cm-EDGES data
16:15-16:30	Suman Chatterjee	Prospects and challenges for detecting the 21cm power spectrum with the Ooty Wide Field Array (OWFA)
16:45-17:00	Madhurima Choudhury	21cm signal extraction using ANN
17:10-17:15	Pankaj Saha	Connecting CMB anisotropy and cold dark matter phenomenology via reheating
17:15-17:30	Sampurn Anand Jha	Cosmic viscosity as a remedy for tension between PLANCK and LSS data

December 12, 2019

Session Chairs :

Surhud More (surhud@iucaa.in)

Nishikanta Khandai (nkhandai@niser.ac.in)

Time	Speaker	Title
16:00 – 16:30	L. Sriramkumar	Can bouncing scenarios generate primordial features
16:30 – 16:45	Ragavendra H.V.	Imprints of the onset of inflation on the scalar bispectrum
16:45-17:00	Jaffino Stargen	Quantum-to-classical transition of primordial cosmological perturbations in bouncing universes
17:00-17:15	Sukannya Bhattacharyya	Primordial Black Holes and Gravitational Waves in non-standard cosmologies
17:15-17:30	Ruchika Kaushik	Bayesian evidences for dark energy models in light of current observational data
17:30-17:45	Arnab Chakraborty	Detail analysis of foregrounds in ELAIS-N1 field using uGMRT

