

## List Of Publications/Preprints

### A. In Refereed Journals:

1. *Quantum Imprints on CMBR*; Shreya Banerjee, Universe **9**, 9, 405, 2023.
2. *Alleviating  $H_0$  Tension with New Gravitational Scalar Tensor Theories*; Shreya Banerjee, Maria Petronikolou, Emmanuel N. Saridakis, Phys. Rev. D **108**, 024012, 2023.
3. *Prospects of Probing Dark Matter Condensates with Gravitational Waves*; Shreya Banerjee, Sayantani Bera, David F. Mota, JCAP **03**, 041, 2023.
4. *Constraining  $F(R)$  bouncing cosmologies with primordial black holes*; Shreya Banerjee, Theodoros Papanikolaou, Emmanuel N. Saridakis, Phys. Rev. D **106**, 124012, 2022.
5. *Luminosity Selection for Gamma Ray Burst*; Shreya Banerjee, Dafne Guetta, A&A, **661**, A145, 2022.
6. *Differential Source Count for Gamma Ray Bursts*; Shreya Banerjee, David Eichler, Dafne Guetta, ApJ, **921**, 79, 2021.
7. *Growth of Linear Perturbations in a Universe with Superfluid Dark Matter*; Shreya Banerjee, Sayantani Bera and David F. Mota, JCAP **07**, 034, 2020.
8. *Running Vacuum from Dynamical Spacetime Cosmology*; S. Banerjee, D. Benisty, E.I. Guendelman, Bulg. J. Phys. **48**, 117-137, 2021.
9. *Evading the theoretical no-go theorem for nonsingular bounces in Horndeski/Galileon cosmology*; Shreya Banerjee, Yi-Fu Cai and Emmanuel N. Saridakis, Class. Quant. Grav. **36**, 135009, 2019.
10. *Dynamics of inflation and dark energy from  $F(R, \mathcal{G})$  gravity*; S. D. Odintsov, V. K. Oikonomou and S. Banerjee, Nucl. Phys. B **938**, 935-956, 2019.
11. *Bounce and cyclic cosmology in new gravitational scalar-tensor theories*; Emmanuel N. Saridakis, Shreya Banerjee and R. Myrzakulov, Phys. Rev. D **98**, 063513, 2018.
12. *Constraints on fourth order gravity from binary pulsars and gravitational waves*; Shreya Banerjee, Sayantani Bera, Srimanta Banerjee and T. P. Singh, Phys. Rev. D **96**, 084015 (2017).
13. *On signatures of spontaneous collapse dynamics modified single field inflation*; Shreya Banerjee, Suratna Das, K. Sravan Kumar, T. P. Singh, Phys. Rev. D **95**, 103518 (2017).

14. *Quantum discord as a tool for comparing collapse models and decoherence*; Shreya Banerjee, Sayantani Bera, Tejinder P. Singh, Phys.Lett. A **380** 3778-3785 (2016).
15. *Quantum Nonlocality, and the End of Classical Spacetime*; Shreya Banerjee, Sayantani Bera and Tejinder P. Singh, Int. J. Mod. Phys. D **25**, 1644005 (2016).
16. *Bounce and cyclic cosmology in weakly broken galileon theories*; Shreya Banerjee, Emmanuel N. Saridakis, Phys. Rev. D **95**, 063523 (2017).
17. *Hysteresis in the sky*, Sayantan Choudhury; Shreya Banerjee, Astroparticle Physics **80**, 34-89 (2016).
18. *Cosmological Constant, Quantum Measurement, and the Problem of Time*; Shreya Banerjee, Sayantani Bera, Tejinder P. Singh, Int. J. Mod. Phys.**24**, 1544011 (2015).
19. *Cosmic Acceleration in a Model of Fourth Order Gravity*; Shreya Banerjee, Nilesh Jayswal, Tejinder P. Singh, Phys. Rev. D **92**, 084026 (2015).
20. *Classicalization of inflationary perturbations by collapse models in the light of BICEP2*; Suratna Das, Satyabrata Sahu, Shreya Banerjee, T. P. Singh, Phys. Rev. D **90**, 043503 (2014).

#### **B. Conference Proceedings:**

1. *Classicalization Of Inflationary Perturbations using Collapse Models*; Proceedings of the Fourteenth Marcel Grossmann Meeting on General Relativity Rome, Italy 2015, Edited by M. Bianchi, R.T. Jantzen and R. Ruffini, World Scientific, 2017.
2. *Evolution of Quantum Universe, Quantum Measurement and Cosmological Constant*; Proceedings of the Fourteenth Marcel Grossmann Meeting on General Relativity Rome, Italy 2015, Edited by M. Bianchi, R.T. Jantzen and R. Ruffini, World Scientific, 2017.
3. *Explaining Late-time Acceleration in a Model of Fourth Order Gravity*; Proceedings of the Fourteenth Marcel Grossmann Meeting on General Relativity Rome, Italy 2015, Edited by M. Bianchi, R.T. Jantzen and R. Ruffini, World Scientific, 2017.
4. *Cosmics Hysteresis*; Proceedings of the Fourteenth Marcel Grossmann Meeting on General Relativity Rome, Italy 2015, Edited by M. Bianchi, R.T. Jantzen and R. Ruffini, World Scientific, 2017.

#### **C. Work in Progress:**

1. *Observational Signatures of Decoherence in Quantum Cosmology*, Shreya Banerjee, Kristina Giesel, Micahel Kobler, under preparation.

2. *Observational Consequences of SAPT backreactions in quantum cosmology*, Shreya Banerjee, Susanne Schander, Thomas Thiemann, under preparation.
3. *Quantum Gravitational Effects on CMB in the presence of Starobinsky-like inflation*, Shreya Banerjee, Claus Kiefer, Sravan Kumar, under preparation.
4. *Resolving Hubble Tension and  $\sigma_8$  tension with DHOST Theories*, Shreya Banerjee, Maria Petronikolou, Emmanuel N. Saridakis, under preparation.