LIST OF PUBLICATIONS

1. R. Co and **S. C. Tadepalli**, "*New Isocurvature Constraints from JWST UV Luminosity Function*", [arxiv: 2605.11079]. (accepted in PRD)

2. **S. C. Tadepalli**, "*Geometric Suppression of CMB isocurvature and a blue-tilted spectrum*", PRD (114) 2, 023550, [arxiv:2601.22221].

3. R. Co, S. C. Lam, **S. C. Tadepalli** and T. Takahashi, "*Reviving sub-keV Warm Dark Matter: a UVLF-based analysis*", JCAP 07, 010, [arxiv:2512.16987].

4. **S. C. Tadepalli** and T. Takahashi, "*Warm Dark Matter meets Cold Dark Matter Isocurvature*", JCAP 07, 057, [arxiv:2508.03805].

5. Z. Gao, T. Li, Y Kvasiuk, **S. C. Tadepalli** et. al., "*Test-time Scaling Techniques in Theoretical Physics—A comparison of Methods on the TPBench Dataset*", [arxiv:2506.20729].

6. D. J. H. Chung, **S. C. Tadepalli** et. al., "*Theoretical Physics Benchmark (TPBench)—a Dataset and Study of AI Reasoning Capabilities in Theoretical Physics*", Mach.Learn.Sci.Tech. 6 (2025) 3, 030505, [arxiv:2502.15815].

7. R. Co, T. Lee, **S. C. Tadepalli**, "*Non-Gaussianity from explicit U(1)-breaking interactions*", JCAP 2025 (07), 070, [arxiv:2412.13246].

8. D. J. H. Chung and **S. C. Tadepalli**, "*Large blue spectral index from a conformal limit of a rotating complex scalar*", PRD (111) 8, 083527, [arxiv:2406.12976].

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12. D. J. H. Chung and **S. C. Tadepalli**, "*An Analytic Treatment of Underdamped Axionic Blue Isocurvature Perturbations*", PRD (105) 12, 123511 (2022), [arxiv:2110.02272].

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