

# List of Publications

Premvijay Velmani

November, 2024

1. Premvijay Velmani, Aseem Paranjape, 2023, “The quasi-adiabatic relaxation of haloes in the IllustrisTNG and EAGLE cosmological simulations”, *Monthly Notices of the Royal Astronomical Society*, **520**(2):2867-2886. [doi:10.1093/mnras/stad297](https://doi.org/10.1093/mnras/stad297) [ads:2023MNRAS.520.2867V](https://arxiv.org/abs/2023MNRAS.520.2867V)
2. Premvijay Velmani, Aseem Paranjape, 2024, “A self-similar model of galaxy formation and dark halo relaxation”, *Journal of Cosmology and Astroparticle Physics*, **2024**(5):080. [doi:10.1088/1475-7516/2024/05/080](https://doi.org/10.1088/1475-7516/2024/05/080), [ads:2024JCAP...05..080V](https://arxiv.org/abs/2024JCAP...05..080V)
3. Premvijay Velmani, Aseem Paranjape, 2024, “Dynamics of the response of dark matter halo to galaxy evolution in IllustrisTNG”, submitted to JCAP, *arXiv e-prints*, [doi:10.48550/arXiv.2407.08030](https://doi.org/10.48550/arXiv.2407.08030), [ads:2024arXiv240708030V](https://arxiv.org/abs/2024arXiv240708030V)
4. Premvijay Velmani, Aseem Paranjape, 2024, “Role of astrophysical modeling on dark matter halo relaxation response at redshifts  $z = 0$  and  $z = 1$ ”, submitted to JCAP, *arXiv e-prints*, [doi:10.48550/arXiv.2408.04864](https://doi.org/10.48550/arXiv.2408.04864), [ads:2024arXiv240804864V](https://arxiv.org/abs/2024arXiv240804864V)
5. Sujatha Ramakrishnan, Premvijay Velmani, 2022, “Properties beyond mass for unresolved haloes across redshift and cosmology using correlations with local halo environment.”, *Monthly Notices of the Royal Astronomical Society*, **516**(4):5849-5862. [doi:10.1093/mnras/stac2605](https://doi.org/10.1093/mnras/stac2605)