

Cosmological Evidences of Dark Matter through the CMB

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1 Introduction

- brief thermal history of the universe and how to get to the cmb and what is it?
- practical Motivation for studying the cmb: nice spectrum black body spectrum: physics well known, very intense radiation
- which info can we get from the cmb: Big bang, matter and energy content of the universe—dark matter is a big part of the matter content it influenced the spectrum of the CMB — so it played a role.
- structure of the paper

2 From the Discovery of the CMB to the Planck mission

[1] -discovery of the cmb -filtering of the images -different missions



Figure 1: The Universe

3 Conclusion

nn [2]

References

- [1] Martin Bucher. Physics of the cosmic microwave background anisotropy. January 2015.
- [2] Nikhil Padmanabhan and Douglas P. Finkbeiner. Detecting Dark Matter Annihilation with CMB Polarization : Signatures and Experimental Prospects. *Physical Review D*, 72(2), July 2005.