Cosmological Evidences of Dark Matter through the CMB

Lorenzo Speri

1 Introduction

The recent measurements of the Cosmic Microwave Background (CMB) radiation allowed us to infer the presence of Dark Matter in the Universe. In this summary we will explain qualitatively how the presence of Dark Matter influences the CMB anisotropies.

 $\mathbf{2}$



Figure 1: The Universe

3 Conclusion

"I always thought something was fundamentally wrong with the universe" [1]

References

[1] Nikhil Padmanabhan and Douglas P. Finkbeiner. Detecting Dark Matter Annihilation with CMB Polarization: Signatures and Experimental Prospects. *Physical Review D*, 72(2), July 2005.