## **Testing Inflationary Models with Galaxy Formation Simulations**

Tuesday 29 November 2016 15:00 (20 minutes)

Theories of cosmological inflation often predict that cosmic conditions will vary from place to place in the universe as a whole. In particular, the value of the cosmological constant can plausibly explained by a combination of environmental variation and it's effect on galaxy formation. In such models, it is crucial that we understand how quickly and efficiently the onset of accelerating expansion shuts down accretion of matter into dark matter haloes and galaxies. I will show simulations, based on the cosmological galaxy formationn code of the Eagle collaboration, that investigates this effect. More generally, I will show how an understanding of galaxy transformation can inform fundamental cosmology.

Summary

Author: BARNES, Luke

Presenter: BARNES, Luke

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