ChangHoon Hahn

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Center for Cosmology and Particle Physics Department of Physics New York University 4 Washington Place, Room 538 New York, NY 10003

Education

Ph.D. 2017 Department of Physics, New York University

(Expected) Advisors: Michael R. Blanton and Roman Scoccimarro

Thesis: Galaxies and their Host Dark Matter Structures

B.Sc. 2011 Department of Physics and Astronomy, Rutgers University

Advisor: Andrew J. Baker

Thesis: Obscuration in Host Galaxies of Active Galactic Nuclei

Awards and Honors

2016 - 2017	NYU GSAS Dean's Dissertation Fellowship
2015 - 2016	James Arthur Graduate Fellowship
2015, 2016	NYU GSAS Dean's Student Travel Grant (\$1000 total)
2011	Honors in Astronomy - SAS Paul Robeson Scholar

Publications (5 first-authored; 9 total)

1. **ChangHoon Hahn**, Jeremy L. Tinker, Andrew R. Wetzel *Star Formation Quenching Timescale of Central Galaxies in a Hierarchical Universe* ApJ, *2016* submitted (arXiv:1609.04398).

2. Mohammadjavad Vakili, ChangHoon Hahn

How are galaxies assigned to halos? Searching for assembly bias in the SDSS galaxy clustering ApJ, 2016 submitted.

3. Sergio Rodríguez-Torres, Johan Comparat, Fransisco Prada, Gustavo Yepes, Etienne Burtin, Pauline Zarrouk, Pierre Laurent, **ChangHoon Hahn**, et al.

Clustering of Quasars in the First Year of the SDSS-IV eBOSS survey: Interpretation and halo occupation distribution

MNRAS, 2016 submitted.

- ChangHoon Hahn, Romam Scoccimarro, Michael R. Blanton, Jeremy L. Tinker, Sergio Rodríguez-Torres
 The Effect of Fiber Collisions on the Galaxy Power Spectrum Multipole MNRAS, 2016 submitted (arXiv:1609.01714).
- 5. Zhongxu Zhai, Jeremy L. Tinker, **ChangHoon Hahn**, et al. *The clustering of luminous red galaxies at z* ~ 0.7 *from eBOSS data* ApJ, *2016* submitted (arXiv:1607.05383).
- 6. **ChangHoon Hahn**, Mohammadjavad Vakili, Kilian Walsh, Andrew P. Hearin, David W. Hogg, Duncan Campbell

Approximate Bayesian Computation in Large Scale Structure: Constraining the Galaxy-Halo Connection MNRAS, 2016 submitted (arXiv:1607.01782).

7. Sergio Rodriguez-Torres, Chia-Hsun Chuang, Fransisco Prada, Hong Guo, Anatoly Klypin, **ChangHoon Hahn**, et al.

The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Modeling the clustering and halo occupation distribution of CMASS galaxies in the Data Release 12 MNRAS, 460, 1173, 2016 (arXiv:1509.06404).

8. **ChangHoon Hahn**, Michael R. Blanton, John Moustakas, Alison L. Coil, Richard J. Cool, Daniel J. Eisenstein, Ramin A. Skibba, Kenneth C. Wong, Guangtun Zhu

PRIMUS: Effects of Galaxy Environment on the Quiescent Fraction at z < 0.8 ApJ, 806, 162, 2015 (arXiv:1412.7162).

9. **ChangHoon Hahn**, Jerry A. Sellwood, Carlton Pryor Velocity-space substructure from nearby RAVE and SDSS stars

MNRAS, 418, 2459, 2011 (arXiv:1102.4626).

Presentations

10/2016 - Informal Talk @ Yale University

Evolving Galaxies in a Hierarchical Universe

 $08/2016-BOSS\ Lunch\ Talk\ \ @\ \ Lawrence\ Berkeley\ National\ Laboratory$

Quenching Timescale of Central Galaxies

 $08/2016-Poster \ \, @ \ \, Mapping the \ \, Pathways of \ \, Galaxy \ \, Transformation \ \, Across \ \, Time \ \, and \ \, Space$

Quenching Timescale of Central Galaxies (Winner: Best Poster)

06/2016 – Seminar Talk @ Universidad Nacional de Columbia

How do Galaxies Stop Star-Formation

06/2016 - Poster @ Statistical Challenges in Modern Astronomy VI

Approximate Bayesian Computation in Large Scale Structure

04/2016 – Blackboard Talk $\,@\,$ Center for Cosmology and Particle Physics NYU

Weighing Neutrinos with Galaxies

 $07/2015-Contributing\ Talk\ @\ SDSS-IV\ Collaboration\ Meeting$

Fiber Collision Correction for Galaxy Power Spectrum

02/2015 – Contributing Talk @ Multi-Object Spectroscopy in the Next Decade PRIMUS: Effects of Galaxy Environment on the Quiescent Fraction

12/2014 - Contributing Talk @ BOSS/eBOSS Collaboration Meeting

The Effect of Fiber Collisions on the Power Spectrum and Bispectrum

09/2014 – Contributing Talk @ Evolving Galaxies in Evolving Environments

PRIMUS: Effects of Galaxy Environment on the Quiescent Fraction at z < 0.8

08/2014 – Brown Bag Talk @ Center for Cosmology and Particle Physics NYU Galaxy Environment on the Quiescent Fraction

Outreach and Activities

2014 - present Chair of NYU CCPP Astro-Coffee

2011 - present Chancellor of the Intellectually Stimulating Craic

2015 Represented the Sloan Digital Sky Survey at the NY Hall of Science Big Data Fest

References

Prof. Michael R. Blanton Center for Cosmology and Particle Physics

michael.blanton@nyu.edu New York University, USA

Prof. Roman Scoccimarro Center for Cosmology and Particle Physics

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Prof. Jeremy L. Tinker Center for Cosmology and Particle Physics

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Prof. Andrew R. Wetzel Department of Physics

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Prof. David W. Hogg Center for Cosmology and Particle Physics

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