Hung-Jin Huang CURRICULUM VITAE

Contact The McWilliams Center for Cosmology

> Department of Physics Carnegie Mellon University

5000 Forbes Avenue, Pittsburgh, PA 15213, USA

Research Cosmology and Extragalactic Astrophysics

Large-scale structures, weak gravitational lensing, intrinsic alignment of galaxies, Interests

galaxy-halo connection, galaxy formation and evolution

Educational Ph.D in Physics (Expected) Aug 2014 - Jul 2019

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Website: https://hungjinh.github.io

Department of Physics, Carnegie Mellon University, Pittsburgh, PA USA Background Thesis project: Astrophysical systematics in weak lensing

> M.S. in Astrophysics Sep 2012 - Jun 2014

Graduate Institute of Astrophysics, National Taiwan University, Taipei, Taiwan Thesis project: Gas motions around the protostar NGC 1333 IRAS 4A2

Sep 2008 - Jun 2012 **B.S.** in Physics

Department of Physics, National Taiwan University, Taipei, Taiwan

Scientific • Large Synoptic Survey Telescope Dark Energy Science Collaboration (LSST DESC)

Collaborations • Dark Energy Survey (DES) (External Collaborator)

Teaching • Introduction to Astronomy, CMU

Fall 2017

Experience • From Quarks to Black Holes, NTU Spring 2013

Department • Co-organizer of Astrosnacks and Hack hours 2017-2018 The joint student seminars between CMU and Pitt focusing on astrophysics and coding. Service

> • LOC of LSST DESC Collaboration meeting at CMU Summer 2018

Publications (ADS full list*)

- H.-J. Huang, T. Eifler, R. Mandelbaum, and S. Dodelson. Modeling baryonic physics in future weak lensing surveys. ArXiv e-prints, September 2018 (submitted to MNRAS)
 ADS arXiv:1809.01146
- Y.-T. Lin, H.-J. Huang, and Y.-C. Chen. An Analysis Framework for Understanding the Origin of Nuclear Activity in Low-power Radio Galaxies. AJ, 155:188, May 2018
 ADS arXiv:1803.02482
- 3. H.-J. Huang, R. Mandelbaum, P. E. Freeman, Y.-C. Chen, E. Rozo, and E. Rykoff. Intrinsic alignment in redMaPPer clusters II. Radial alignment of satellites towards cluster centres. MNRAS, 474:4772–4794, March 2018 ADS arXiv:1704.06273
- 4. H.-J. Huang, R. Mandelbaum, P. E. Freeman, Y.-C. Chen, E. Rozo, E. Rykoff, and E. J. Baxter. Intrinsic alignments in redMaPPer clusters I. Central galaxy alignments and angular segregation of satellites. MNRAS, 463:222–244, November 2016
 ADS arXiv:1605.01065
- Y.-T. Lin, R. Mandelbaum, Y.-H. Huang, H.-J. Huang, N. Dalal, B. Diemer, H.-Y. Jian, and A. Kravtsov. On Detecting Halo Assembly Bias with Galaxy Populations. ApJ, 819:119, March 2016
 ADS arXiv:1504.07632
- T. Inagaki, Y.-T. Lin, H.-J. Huang, B.-C. Hsieh, and N. Sugiyama. Stellar mass assembly of brightest cluster galaxies at late times. MNRAS, 446:1107–1114, January 2015
 ADS arXiv:1409.4820

Presentations & Conferences 2018

Presentations • BCCP cosmology seminar

Invited talk: Astrophysical systematics in weak lensing

CosmoClub

Invited talk: Astrophysical systematics in weak lensing

• Tea talk

Invited talk: Modeling baryonic physics in weak lensing

• LSST DESC Collaboration Meeting

Talk: Modeling baryonic physics in weak lensing for LSST

Machine Learning in Science and Engineering

• Machine Learning & time domain astrophysics workshop

• LSST DESC WL general telecon

Talk: Mitigating baryon's effect on weak lensing observables

• SnowCluster: the physics of galaxy cluster

Poster: Intrinsic alignments of galaxies in redMaPPer clusters

2017 • Cosmology on the beach

Talk: Mitigating baryon's effect on weak lensing observables

SLC, Utah Mar 18-23

CMU

UC Berkeley Oct 9

Stanford Oct 5

CMU Jul 23-27

CMU Jun 06-08

Jun 05

Mar 12

UC Santa Cruz Oct 8

Punta Mita Dec 10-16

^{*}Underlined text contains hyperlinks in the electronic version

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• LSST DESC Collaboration Meeting

Stony Brook U. Jul 10-14

Poster: IIntrinsic alignments of galaxies in redMaPPer clusters

• The Galaxy-Halo Connection Across Cosmic Time

KITP May 15-19

Poster: Intrinsic alignments of galaxies in redMaPPer clusters

2016 • Statistical Challenges in Modern Astronomy VI CMU Jun 06-10

References

• Rachel Mandelbaum

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• Tim Eifler

Steward Observatory Department of Astronomy, University of Arizona

Tucson, AZ 85721, USA

• Scott Dodelson

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