Hung-Jin Huang

Curriculum Vitae

Contact Department of Astronomy and Steward Observatory

University of Arizona

933 North Cherry Avenue, Tucson, AZ 85719, USA

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Website: https://hungjinh.github.io

Research Cosmology and Extragalactic Astrophysics

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

galaxy-halo connection, galaxy formation and evolution

Appointment Postdoctoral Research Associate

Sep 2019 - Present

Steward Observatory, University of Arizona

Education Ph.D in Physics Aug 2014 - Aug 2019

Department of Physics, Carnegie Mellon University, Pittsburgh, PA USA

M.S. in Astrophysics Sep 2012 - Jun 2014

Graduate Institute of Astrophysics, National Taiwan University, Taipei, Taiwan

B.S. in Physics Sep 2008 - Jun 2012

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

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

• LOC of LSST DESC Collaboration meeting at CMU Summer 2018

Publications (ADS full list*)

1. H.-J. Huang, Tim Eifler, Rachel Mandelbaum, and Scott Dodelson. Modelling baryonic physics in future weak lensing surveys. MNRAS, 488(2):1652–1678, Sep 2019

ADS arXiv:1809.01146

- 2. 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
- 5. 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
- 6. 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

& Conferences 2018

Presentations • Accurate lensing in the era of precision Cosmology UC Berkeley Jan 14-16 Talk: Modeling uncertainties of baryon in cosmic shear

> UC Berkeley Oct 9 • BCCP cosmology seminar Talk: Astrophysical systematics in weak lensing

> CosmoClub UC Santa Cruz Oct 8

> Talk: Astrophysical systematics in weak lensing Tea talk Stanford Oct 5

Talk: Modeling baryonic physics in weak lensing

• LSST DESC Collaboration Meeting CMU Jul 23-27

Talk: Modeling baryonic physics in weak lensing for LSST

• Machine Learning in Science and Engineering CMU Jun 06-08

• Machine Learning & time domain astrophysics workshop CMU Jun 05

Talk: Mitigating baryon's effect on weak lensing observables

SLC, Utah Mar 18-23 • SnowCluster: the physics of galaxy cluster Poster: Intrinsic alignments of galaxies in redMaPPer clusters

• LSST DESC WL general telecon

Mar 12

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

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References

• Rachel Mandelbaum

The McWilliams Center for Cosmology Department of Physics, Carnegie Mellon University Pittsburgh, PA 15213, USA

• Tim Eifler
Steward Observatory
Department of Astronomy, University of Arizona
Tucson, AZ 85721, USA

• Scott Dodelson

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