Hui Kong

Website: driftingpig.github.io Email: kong.291@osu.edu GitHub: github.com/driftingpig

EDUCATION

The Ohio State University

Columbus, Ohio, USA

Ph.D. Candidate in Physics, Advisor: Klaus Honscheid, Ashley Ross

2016–2022 (Expected)

- Thesis: "Mitigating imaging systematics with image simulation"

University of Science and Techonology of China

Hefei, Anhui, China

B.S. in Physics, Advisor: Guangshun Huang

2012-2016

- Thesis: "Track reconstruction in the BGO Calorimeter at the Dark Matter Particle Explorer"

Research Interests

- Large Scale Structure: Baryon Acoustic Oscillations, Redshift Space Distortion, Primodial Non-gaussianity, Photometric Redshift, Spectroscopic Redshift, Mock data analysis
- Image Simulation: Imaging systematics, Image reduction

Collaboration

- Dark Energy Spectroscopic Instrument (DESI)
 - image simulation on DESI galaxy tracers
 - telescope focus analysis during DESI commissioning
 - DESI shutter characterization
- The Extended Baryon Oscillation Spectroscopic Survey (eBOSS)
 - image simulation and galaxy clustering analysis on eBOSS ELGs
- Dark Energy Survey (**DES**)
 - Modified gravity analysis on DES-CMASS sample

TALKS

Astrophysics Seminar, Ohio University

October 13, 2021

- Image simulation and sample characterization of Dark Energy Spectroscopic Instrument (DESI) Galaxies: towards probing the origin of inflation

CCAPP Seminar, The Ohio State University

September 29, 2021

Image simulation and sample characterization of DESI LRGs

DESI Collaboration Meeting, (Virtual)

June 18, 2021

- Current status of Obiwan development

DESI Collaboration Survey Validation and Early Spectroscopy Workshop, The Ohio State University

- Mitigating Imaging Systematics Using Obiwan DESI Collaboration Meeting, University of California, Berkeley December 9, 2019

July 11, 2019

- Mitigating Imaging Systematics in eBOSS ELGs Using Obiwan

DESI Collaboration Meeting, University of Arizona

May 24, 2018

- The application of Obiwan to eBOSS

TEACHING & SERVICE

- Referee, Patterns Cell Press
- Volunteer, Breakfast of Science Champions, OSU

November 2019

• Volunteer, DESI comissioning instrument assistance

Spring 2019

• Grader, Physics 7401: Electromagnetic Field Theory

Spring 2018

Teaching Associate Physics 1250: Mechanics, Work and Energy, Thermal Physics, OSU

Autumn 2017

Volunteer, COSI Solar Eclipse, Columbus, OH

August 2017

- Grader, Physics 1251H: Honors Physics: E&M; Thermal Physics, Waves, and Quantum Physics, OSU Spring 2017
- Grader, Physics 1250H: Honors Physics: Mechanics and Conservation Laws; Special Relativity, OSU Autumn 2016

Honors

- 2015 Outstanding undergraduate scholarship
- 2015 Mathematical Contest in Modeling (Meritorious Winner)
- 2014 Outstanding undergraduate scholarship
- 2014 Competition of physics research experiment in USTC (first prize)
- 2013 Kwang-Hua Educational Foundation scholarship
- 2012 Outstanding undergraduate scholarship

Observing Experience

• DESI Observing Scientist (OS) remote shift

3 nights, May 21-23, 2021

• DESI Data Quality Scientist (DQS) remote shift

3 nights, 03/24, 04/28, 04/29 2021

• DESI Commissioning Observing

7 nights, 03/31 - 04/07, 2019