# LEI YANG

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#### RESEARCH INTERESTS

- · Galaxy formation and evolution
- · Galaxy-dark matter halo connection
- · Large-scale structure of the Universe

#### **EDUCATION**

· Shanghai Jiao Tong University

April 2015 - June 2019 (expected)

Ph.D. in Astronomy

Superviser: Prof. Jing, Yipeng

Thesis: "Toward accurate measurement of the property-dependent galaxy clustering"

Case Western Reserve University

August 2012 - June 2014

M.S. in Astronomy

Academic Adviser: Prof. Morrison, Heather

Peking University

September 2009 - June 2012

M.S. in Astrophysics

Superviser: Prof. Peng, Eric W.

Thesis: "Measuring Detailed Chemical Abundances from Co-added Medium-resolution Spectra I. Tests Using Milky Way Dwarf Spheroidal Galaxies and Globular Clusters"

· Hebei University

September 2004 - June 2008

B.S. in Optical Information Science And Technology

Thesis: "Optical correction for digital image"

# **EXPERIENCE**

#### Research

- · Measuring rotation curves of the low surface brightness galaxies with long-slit spectra (CWRU, Summer 2013)
- · Calculating the galaxy two-point correlation function (CWRU, Spring 2014)
- $\cdot$  Co-added spectral method testing with the Milky Way RGB stars (UCSC,  $Apr\mbox{-}May~2011)$
- · Co-added programming and spectrum analysis (Caltech, March 2011)

# **Teaching**

- · TA and instructor, Experiment of College Physics on temperature sensor (SJTU, Spring 2016)
- · TA, Introduction to Astrophysics (SJTU, Fall 2015/2016)
- · TA, Galaxies and Cosmology (CWRU, Spring 2013)
- · TA, The Sun and its Planets (CWRU, Fall 2013 and Spring 2014)
- · TA, Thermal Physics (PKU, Fall 2011)

#### **Talks**

· Research Talk: Using the Modified Nearest Neighbor method to correct the fiber-collision effects on galaxy clustering (DESI 6th Workshop, U. of Utah Mar 26, 2019)

- · Lunch Talk: Detailed chemical abundances measurements from medium resolution co-added Spectra (CWRU, Feb 21, 2013)
- · Public Talk: Gravitational waves (Shangbao Middle school, Apr 11, 2016)

#### **PUBLICATION**

- · Lei Yang, Yipeng Jing, Xiaohu Yang "Accurate measurements of the property-dependent galaxy clustering with  $V_{\text{max}}$  random samples" 2019, submitted to ApJ
- · Lei Yang, Yipeng Jing, Xiaohu Yang, Jiaxin Han "Using modified nearest neighbor method to correct fiber-collision effects on galaxy clustering" 2019, ApJ, 872, 26Y
- · Lei Yang, Evan N. Kirby, Puragra Guhathakurta, Eric W. Peng, Lucy Cheng "Measuring Detailed Chemical Abundances from Co-added Medium-resolution Spectra I. Tests Using Milky Way Dwarf Spheroidal Galaxies and Globular Clusters" 2013, ApJ, 768, 4Y

#### **SKILLS**

· Programming Fortran, IDL, Python

· Others Linux, IRAF, DS9, Openmp

#### REFERENCES

# · Prof. Yipeng Jing

Department of Astronomy, School of Physics and Astronomy, Shanghai Jiao Tong University Email: ypjing@sjtu.edu.cn

#### · Prof. Xiaohu Yang

Department of Astronomy, School of Physics and Astronomy, Shanghai Jiao Tong University Email: xyang@sjtu.edu.cn

#### · Prof. Ying Zu

Department of Astronomy, School of Physics and Astronomy, Shanghai Jiao Tong University Email: yingzu@sjtu.edu.cn

# · Prof. Hong Guo

Shanghai Astronomical Observatory, Chinese Academy of Sciences

Email: guohong@shao.ac.cn