# **ZIYAN XU**

# Peking University $\diamond$ Beijing 100871, China ziyanx@pku.edu.cn

#### **EDUCATION**

Peking UniversityBeijing, ChinaPh.D Candidate in Astrophysics2015 - PresentKavli Institute for Astronomy and AstrophysicsBeijing, ChinaPeking UniversityBeijing, ChinaB.S. in Astronomy, specializing in Astrophysics2010 - 2015Department of Astronomy

#### RESEARCH EXPERIENCE

#### Peking University

2015 - present

Ph.D Researcher

- · Advisor: Prof. Gregory Herczeg
- · Probing protoplanetary disk wind with absorption line spectroscopy
- · Dust dynamics in MRI turbulent protoplanetary disks

Collaborator: Dr. Xuening Bai (Tsinghua University)

## University of California, Santa Barbara

2014 - 2015

Student Intern

- · Advisor: Prof. Ruth Murray-Clay
- $\cdot \ \textit{The effect of MRI turbulence on pebble accretion data analysis}$

Analyzed simulation data and compared it with analytical theory.

#### Harvard-Smithsonian Center for Astrophysics

2014 - 2015

Student Researcher

- · Advisor: Dr. Xuening Bai
- · The effect of MRI turbulence on pebble accretion simulation setup

Conducted pebble accretion simulations incorporating realistic disk turbulence using MHD simulations and evaluate the efficiency of the pebble accretion scenario of planetary core growth.

# **Peking University**

2012 - 2013

- $Under graduate\ Researcher$
- · Advisor: Prof. Zuhui Fan
- · Using n-body simulation to probe the formation and evolution of cosmic large-scale structures.

#### CONFERENCE PRESENTATIONS & SEMINARS

#### Planet Formation Workshop, Tokyo, Japan

· Contributed talk, Dust Settling and Clumping in MRI Turbulent Protoplanetary Disks (November 2019)

#### Great Barriers in Planet Formation, Palm Cove, Australia

- · Contributed talk, Probing Protoplanetary Disk Wind with Absorption Line Spectroscopy (July 2019)
- · Poster, Dust Settling and Clumping in MRI Turbulent Protoplanetary Disks (July 2019)

#### Formation and Evolution of Solar System and Exoplanetary Systems, Urumqi, China

· Poster, Dust Settling and Clumping in MRI Turbulent Protoplanetary Disks (July 2019)

#### East Asian Observatory, Hilo, Hawaii

· EAO Seminar Talk, Absorption Lines as a Possible Probe of Protoplanetary Disk Wind (March 2019)

# Astrochemistry 2018: Past, Present and Future, California Intitute of Technology, CA

· Poster, C II Absorption Lines as a Possible Probe of Disk Photoevaporative Wind (July 2018)

#### OWL Summer Program, University of California, Santa Cruz, CA

· Contributed talk, Pebble Accretion in Turbulent Protoplanetary Disks (July 2017, attendee July 2018)

# University of New South Wales, Syndey, Australia

· Astro Seminar Talk, Physical Processes in Protoplanetary Disks: Pebble Accretion and Disk Photoevaporation (March 2018)

# Exoplanets and Planet Formation, Shanghai, China

· Poster, Pebble Accretion in Turbulent Protoplanetary Disks (December 2017)

#### Stanford University, CA

· Invited KIPAC Tea Talk, Pebble Accretion in Turbulent Protoplanetary Disks (July 2017)

#### Earlier Conferences Attending

- · Chinese Astronomical Society Annual Meeting, Peking University (September 2015)
- · The Disk in Relation to The Formation of Planets And Their Protoatmospheres Workshop, International Space Science Institute Beijing (August 2014)

#### TEACHING & OBSERVING EXPERIENCES

# Jame Clerk Maxwell Telescope, Mauna Kea, Hawaii

· Observer, 4 nights (February 2019)

#### Peking University

- · Teaching assistant, Modern Astronomy (Fall 2019 & Spring 2019)
- · Teaching assistant, Stellar Structure and Evolution (Fall 2017)

#### Xinglong Station of National Astronomical Observatory

· Short-term visit to Xinglong Station of National Astronomical Observatory and The Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST) (April 2011)

#### **PUBLICATIONS**

Pebble Accretion in Turbulent Protoplanetary Disks, Xu, Z., Bai, X.-N., & Murray-Clay, R. A. 2017, ApJ, 847, 52

# AWARDS

· Specialty Scholarship (academic award) of Peking University (December 2019)

- · Presidential Scholarship (academic award) of Peking University (December 2018)
- · National Scholarship (academic award) of China (December 2017)
- · Student Award for Outstanding Scientific Research of Peking University (2016 & 2017)
- · May 4th Scholarship (academic award) of Peking University (December 2016)

# TECHNICAL STRENGTHS

Computer Languages Proficient in Python & MATLAB

Familiar with C/C++ & Fortran

Software & Tools Athena/Athena++, LaTeX, DS9, IRAF, VisIt

Language Skills Native Mandarin speaker