Jiani Ding

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EDUCATION

- **University of Arizona** B.S., Astronomy and Physics
  SUMMA CUM LAUDE

PUBLICATIONS AND POSTERS

- **J. Ding**, Z. Cai, X. Fan, *Constraining C iii] Emission in a Sample of Five Luminous z = 5.7 Galaxies*, ApJL, 838, L2 (2017)
- J. Yang, X. Fan, X. Bing, ..., **J. Ding**, *Discovery of 16 New z ~ 5.5 Quasars: Filling in the Redshift Gap of Quasar Color Selection.*, AJ, 153, 184-193 (2017)
- F. Wang, X. Fan, J. Yang, ..., **J. Ding**, *First Discoveries of z > 6 Quasars with the Decam Legacy Survey and Ukirt Hemisphere Survey.*, ApJ, 839, 27-34 (2017)
- **J. Ding**, Z. Cai, X. Fan, et al. *Constraining C iii] Emission in a Sample of Five Luminous z = 5.7 Galaxies*, AAS Poster, Jan 2017

HONORS AND AWARDS

- **Scholarships for Excellent Undergraduate**
  - Galileo Circle Scholarship, College of Science, University of Arizona 2015,2016
  - Purviance Award, Physics Department, University of Arizona 2016
  - Weaver Research Award, Physics Department, University of Arizona 2016
  - The Vesto Melvin Slipher Scholarship, Astronomy Department, University of Arizona 2016
  - Purviance Scholarship, Astronomy Department, University of Arizona 2016
  - Douglass, Andrew E Scholarship, Astronomy Department, University of Arizona 2015
  - Langadas, Angelos C Scholarship, Astronomy Department, University of Arizona 2014
- **Awards for Excellent Undergraduate**
  - Academic Year Highest Academic Distinction, College of Science, University of Arizona 2015
  - Dean′s List with Distinction, College of Science, University of Arizona 2014

ACADEMIC ACTIVITIES

- **Talks**

  Talk in Inter[Stellar and Galactic] Medium Program of Studies:
  University of California, Santa Cruz, CA, USA Nov 2016
  - CIII] Emission Lines from Galaxies in the Early Universe

  Undergraduate Physics Symposium Talk:
  University of Arizona, Tucson, AZ, USA May 2015
  - CIII] Emission Lines from Galaxies in the Early Universe

- **Observation Experience**
  - 2 nights on Bok telescope, Kitt Peak National Observatory Jul 2015
  - 3 nights on Bok telescope, Kitt Peak National Observatory Mar 2016
  - 1 night on LBT telescope May 2016
  - 3 nights on MMT telescope May 2016

RESEARCH EXPERIENCE

○ **Research Assistant:**
Constraining CIII] emission in a statistical sample of five $z = 5.7$ galaxies Jul 2015 - Present
Advisor: Prof. Xiaohui Fan, Steward Observatory, University of Arizona
and Dr. Zheng Cai, UCO/Lick Observatory, UC Santa Cruz

- Reducing the *HST* data using MultiDrizzle and measuring the fluxes of CIII] emissions using SExtractor;
- Finding the measurement on equivalent width of the CIII] emission is 4.08 ± 2.19Å in one galaxy of our sample and putting the upper limits of both fluxes and equivalent widths on the galaxies that do not detect CIII] emissions;
- Summarizing and discussing the astrophysics implications of the results in a paper submitted to ApJL.

○ **Research Assistant:**
Studying the quasar host galaxy through an associate DLA system Jul 2016 - Present
Advisor: Prof. Xiaohui Fan, Steward Observatory, University of Arizona
and Dr. Zheng Cai, UCO/Lick Observatory, UC Santa Cruz

- Using MultiDrizzle package to reduce the *HST* data and using IRAF to form a PSF for GALFIT fitting;
- Using SExtractor to measure the photometry of the quasar host galaxy and using GALFIT to construct a two components minor merging model of the galaxy;
- Writing up results in a paper in preparation.

○ **Course Project:**
Identifying star forming regions in M100 cluster Mar 2015 - May 2015
Advisor: Prof. Laird Close, Steward Observatory, University of Arizona

- Selecting and deciding which galaxies we can take a high resolution image from Kuiper telescope to finish our science and using IRAF to analyze our data.

○ **Research Assistant:**
Analyzing the rotation period of stars from Kepler Space Telescope data Aug 2013- May 2014
Instructor: Mr. Patrick Sheehan, Steward Observatory, University of Arizona

- Analyzing the brightness variation curve of a star due to the starspots in order to determine the rotation period of that star by using PyRAF.

SKILLS

○ Programming: C, PYTHON

○ Software: IRAF, GALFIT, SExtractor, MultiDrizzle, LaTeX

○ Language: Mandarin(Native), English(fluent), Cantonese(Native)

OUTREACH & VOLUNTEER

○ **Time Step Meeting** Steward Observatory, Tucson, AZ, Sep 2015 - Present

- Being a member in "Time Step," a group focusing on professional development for undergraduates in STEM fields, also giving special support to students represented minorities.
- Giving talk "How to Study and Enjoy Life as a Astronomy and Physics Double Major" in "Time Step."

○ **University Service** Steward Observatory, Tucson, AZ, Aug 2016

- Giving advice and directions to new coming students in student orientation.