YANGYANG LI

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EDUCATION

University of Science and Technology of China *expected 06/2018*
B.S. in Astrophysics

Senior-year undergraduate of Special Class for the Gifted Young, major in astronomy *till 09/2017*
Average score: 84.06/100
GPA: 3.32/4.3
Core curriculum : Theoretical Astrophysics (97), Theoretical Mechanics (80), Space and Time (94), Observational Astrophysics (90), Galactic Astronomy (91), Astronomical Labs (87), Foundation of Stellar Physics (83), Statistical Physics (78), Electrodynamics (65)
Graduate curriculum : Computer Vision (90), Plasma Astrophysics and Fundamentals (91)

STANDARDIZED TESTS

TOEFL : 95(Reading: 26 Listening: 24, Speaking: 23, Writing: 22)
GRE General : 310(V:149 Q:169 AW:3.0)

HONORS

Outstanding student scholarship of National Astronomical Observatories, CAS	11/2017
Caltech 2017 Summer Undergraduate Research Fellowship	06/2017
Outstanding student scholarship for Summer Research Abroad ($ 3000)	06/2017
Excellent freshmen scholarship	10/2014

RESEARCH EXPERIENCE

Exoplanet Group, Caltech 06/2017 - 10/2017
Advisors:Postdoc Ji Wang & Assosiate Prof. Dimitri Mawet

· Subject : Searched for planets in binary stars in K2 Mission field.

- Discovered planet with period of 28 days in EPIC 201920032a binary system with 6500 AU separation and sun-like primary star.
- Used transit and aid method via statistical validation and false positive test.
- Paper finished; awaiting publication in December 2017.

Quasar Group, USTC 06/2016 - Present
Advisor: Prof. Tinggui Wang *Partner: JingWei Liu, graduate student of University of Arizon*

· Subject : Statistically studied covering factor (CF) of warm dust in quasars.

- Used Python and IDL to reduce WISE (space telescope) data; combined with SDSS (ground based telescope) data to calculate warm dust CFs in quasars.
- Classified quasars based on red shift, luminosity, mass of black hole, and other criteria.
- Final paper in progress.

Quasar Group, USTC 06/2016 - Present
Advisor: Prof. Tinggui Wang

· Study the outflow of Quasar

- Studied outflow of quasars; acquired basic knowledge/understanding of outflow.
- Studied relationship between disparate outflows within Broad-Line Region (BLR) and Narrow-Line Region (NLR).

Optical Lab, Astronomy Department, USTC 03/2016 - 06/2016
Advisor: A.P. Qingfeng Zhu

· Designed and assembled grating spectrometer to measure mercury lamp spectrum.

- Team leader; organized group to design and assemble grating spectrometer.
- Responsible for optical design and automation of spectrometer, cooperated with teammates to assemble instruments and collect LabVIEW data.

University of Science and Technology 10/2016
Advisor: Researcher of Polar Research Institude of China. Peng Jiang

· Performed photometric measurement of stellar to find exoplanet, Proxima, by tracking transition curve.

- Performed aperture photometry for images of Proxima Centauri by telescope, AST3-1.
- Acquired high proficiency in photometry and IRAF use.

Gaomeigu, Yunnan Observatories, CAS 02/2016
Advisor: Professor . XiaoBo Dong

· Studied simulation code and usage of Gadget-2 Program.

- Programed in C++.
- Studied knowledge of MOND Theory.
- Mastered basic skills for Ubuntu and other LINUX systems.

RESEARCH SKILLS

Computer Languages
Latex(Proficient), C/C++(Proficient),Python(Proficient), IDL, R(a little), HTML, CSS, Javascript

Software
DS9, IRAF/PyRAF (general)
SExtractor (PSF photometry)
scikit-learn/image, astroML (machine learning)
AGNfitter (SED fitting)
VESPA (false positive probability estimator)

Statistical Techniques
regression, PCA, Bayesian inference, model selection

CONFERENCES & WORKSHOPS

Exoplanets and Planet Formation, Shanghai, China 12/2017
Undergraduate research presentation at USTC, Hefei, China 10/20/2017
-Talk: Search Exoplanets in Binary-Stellar Systems in K2 field and Architecture of Binary Planetary

System

2017 Caltech SURF Seminar, Caltech 08/24/2017

-Talk: Search of Exoplanets in Binary-Stellar Systems and Validation of Planet EPIC 201920032b

Sagan Exoplanet Summer Workshop Microlensing in the Era of WFIRST, Caltech 08/2017

2016 Annual Conference of Astronomical Society of China, Wuhan, China 10/2016

OUTREACHES AND APPOINTMENT

Temporary Lecturer 11/2017

Courses about exoplanet of No.8 High School of Hefei, Hefei, China

Teach Assistant Spring 2017

02201001 Lecture of the Frontier of Astrophysics, USTC

Research Assistant 04/2016 - present

Key Laboratory for Research in Galaxy and Cosmology, USTC

Member of Association of Astronomy in USTC, Hefei, China 2014-2015

REFERENCES

Prof. Tinggui Wang
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