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 : 318(V:149 Q:169 AW:3.0)

HONORS

Outstanding student scholarship of National Astronomical Observatories, CAS ($ 3000)	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

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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   Phone: +86-551-63607503
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