# Jiaxuan Li

#### Personal Data

PLACE AND DATE OF BIRTH: Gansu, China | 28 September 1998

ADDRESS: Building 28, Peking University

No.5 Yiheyuan Road, Haidian District, Beijing

PHONE: +86-18813020982

EMAIL: jiaxuan\_li@pku.edu.cn

HOMEPAGE: https://astrojacobli.github.io/Homepage/

ORCID: © orcid.org/0000-0001-9592-4190

#### **EDUCATION**

SEPTEMBER 2016- Undergraduate Student in DEPARTMETN OF ASTRONOMY,

Peking University, China Major: Astrophysics Advisor: Dr. Yingjie PENG

GPA: 3.85/4 Detailed Transcript

August 2013–June 2016 Senior High School, **Dingxi NO.1 Middle School**, Dingxi, Gansu

AUGUST 2010-JUNE 2013 Junior High School, Gongyuan Road Middle School, Dingxi, Gansu

SEPTEMBER 2004-JUNE 2010 Primary School, Dacheng Primary School, Dingxi, Gansu

#### PRIZES AND SCHOLARSHIPS

SEPTEMBER 2018	AEON SCHOLARSHIP (10,000 RMB), Peking University, China.				
SEPTEMBER 2018	Second Prize of Linbridge Prize for Excellent Undergraduate Research				
	Projects in Astronomy and Astrophysics, Peking University, China.				
APRIL 2018	MERITORIOUS WINNER IN MATHEMATICAL CONTEST IN MODELING (MCM/ICM).				
March 2018	18 Excellent Memeber of Communist Youth League (优秀共青团员),				
	Peking University, China.				
November 2017	Weiming Physics Oustanding Student (未名物理学子),				
	Peking University, China.				
OCTOBER 2017	LEO KOGUAN SCHOLARSHIP (10,000 RMB), Peking University, China.				
OCTOBER 2017	MERIT STUDENT, Peking University, China.				
OCTOBER 2017	INNOVATION PRIZE, Peking University, China.				
AUGUST 2017	First Prize, $8^{th}$ China Undergraduate Physicists' Tournament, Harbin, China				
JANUARY 2016 Bronze Medal (6th place) & Innovation Prize, $2^{nd}$ Princeton Universi					
	PHYSICS COMPETITION, Princeton, US.				

November 2015 Bronze Medal,  $32^{nd}$  China Physics Olympiad, Changsha, China.

#### PRIZES AND SCHOLARSHIPS

August 2015 Silver Medal,  $9^{th}$  International Olympiad on Astronomy and Astrophysics,

Maglang, Indonesia.

April 2015 Gold Medal & Best Result,  $11^{th}$  China National Astronomy Olympiad,

Weihai, China.

JANUARY 2015 Gold Medal (3rd place),  $1^{st}$  Princeton University Physics Competition,

Princeton, US.

August 2014 Bronze Medal,  $8^{th}$  International Olympiad on Astronomy and Astrophysics,

Suceava, Romania.

April 2014 Gold Medal & Best Result,  $10^{th}$  China National Astronomy Olympiad,

Beijing, China.

NOVEMBER 2013 Gold Medal,  $9^{th}$  ASIA-PACIFIC ASTRONOMY OLYMPIAD, Tomohon, Indonesia.

APRIL 2013 Gold Medal,  $9^{th}$  CHINA NATIONAL ASTRONOMY OLYMPIAD, Kunming, China.

#### RESEARCH EXPERIENCE

SEPT. 2018-

Studies on the evolution of massive galaxies using HSC, DECaLS, Dragonfly and GAMA data.

ADVISOR: ALEXIE LEAUTHAUD

JULY 2017-

Inside-out quenching galaxies with  $H\alpha$  ring-like structures

ADVISOR: YINGJIE PENG

We investigated galaxies with H $\alpha$  emission ring-like structures in Mapping Nearby Galaxies at APO (MaNGA) survey, with stellar mass in the range  $9 < \log(M/M_{\odot}) < 12$ . These galaxies are almost located in the green valley on SFR-stellar mass plane. The radius of H $\alpha$  rings are measured and good linear relations between bar length and H $\alpha$  ring radius are found. We reveal that the appearance of H $\alpha$  star-forming ring-like structure has a strong correlation with bar-induced activities, but not with active galactic nuclei (AGN). The majority of our H $\alpha$  ring galaxy sample are galaxies which are classified as LINER with EW(H $\alpha$ ) < 3Å. Low luminosity AGN possibly plays a role in inside-out quenching accompanying with H $\alpha$  ring-like structure. Morphological quenching and bulge show less relation with H $\alpha$  ring galaxies.

#### WORK EXPERIENCE

MAY 2017-MAY 2018

President of Youth Astronomy Society (YAS), Peking University

Youth Astronomy Society is aiming at broadcasting astronomy knowledge to public, especially to students in Peking University. Youth Astronomy Society holds *Routine Observations, Scientific Outreach Lectures, Tuantu Series Lectures, Countryside Observations*, etc. There are also several groups, like Astro-photography Group, Meteor Group, etc.

#### COMPUTER SKILLS

Skilled Languages: Python, LaTeX, Mathematica

Basic Knowledge: IRAF, Excel, Word, PowerPoint, Photoshop

## LANGUAGES

ENGLISH: Fluent.

TOEFL iBT: 103 (Jan 28, 2018)

Reading: 30; Listening: 26; Speaking: 22; Writing: 25.

CHINESE MANDARIN: Mothertongue

CHINESE DINGXI DIALECT: Fluent

# **ACTIVITIES**

JULY 2018	Mentor, Training for Chinese National Astronomy Olympiad Team,			
	Beijing Planetarium, Beijing, China.			
JULY 2018	PKU Student Representative, "Young Talent Plan" 10 Year Anniversary Symposium,			
	USTC, Hefei, China.			
AUGUST 2017	ASIAN SCIENCE CAMP, Kampar, Malaysia.			
MAY 2017	KIAA $10^{th}$ Anniversary Symposium, Peking University, Beijing, China			
OCTOBER 2016	QIUSHI PRIZE AWARDING CEREMONY, Peking University, Beijing, China			
<b>APRIL 2013</b>	Pacific Astronomy and Engineering Summit, Hawaii, U.S.			

## ATTENDED TALKS

JULY 16 2018	Monitoring Active Galactic Nuclei with H $eta$ Asymmetry with the Wyoming Infrared Observatory
	by Mike Brotherton (University of Wyoming).
JULY 13 2018	Highly magnified stars and probes of dark matter substructure
	by Liang Dai (IAS, Princeton).
Apr. 26 2018	The Dark Age and Cosmic Dawn
	by Xuelei Chen (National Astronomical Observatory of China, NAOC).
Mar. 29 2018	UHECR from LL GRBs
	by Peter Meszaros (Pennsylvania State University).
Mar. 22 2018	Binary evolution and its applications
	by Zhanwen Han (Yunnan Observatory).
DEC. 19 2017	LIGO and Gravitational Waves: A New Way to Explore the Universe
	by Rainer Weiss (MIT) and Kip. S. Throne (Caltech).
DEC. 3 2017	Quantum Breakthrough: From Myth, Philosophy to Information Technology
	by Jianwei Pan, USTC.
Ост. 26 2017	The formation of the smallest galaxies
	by Holger Ваимдарт, Queensland University, Australia.
SEPT. 5 2017	Roles of Environment and Core Stellar Density in Star-formation Quenching
	by Petchara Pattarakijwanich, KIAA.

# Undergraduate Student's Transcript Major: ASTROPHYSICS

# Grades

Ехам	GPA	CREDIT
Introduction to Computation	3.77	3
Language, Culture and Communication	3.88	2
Fundamental Astronomy	3.85	3
Linear Algebra (B)	3.97	-
Lectures on The Frontiers of Modern Physics (I)	Pass	2
Mechanics	3.73	4
Advanced Mathematics (B)(I)	3./3 4.00	<del>4</del> 5
Military Theory	3.63	2
Willtary Theory	3.03	2
Outline of Chinese Modern History	3.88	2
Rings, Fields and Galois Theory	3.97	2
Chaos and Fractal in Natural Science	3.89	2
Electromagnetism	3.73	4
Methods of Mathematical Physics (I)	3.93	3
Advanced Mathematics (B)(II)	3.63	5
Thermal Physics	3.94	3
Data Structure and Algorithm	3.52	3
The Logic of Life	3.93	2
Theoretical Mechanics (A)	3.88	4
Swimming	3.52	1
Equilibrium Statistical Physics	3.88	4
Atomic Physics	3.97	3
General Physics Experiment (I)	3.85	3
Methods of Mathematical Physics (II)	3.93	3
Optics	3.63	4
Basics of Cosmological Physics	3.98	3
Astrophysics	3.95	3
Electrodynamics (A)	3.88	4
Special Topics of Methods of Mathematical Physics	3.99	3
An Introduction to Ideological & Moral Culture and Laws	3.73	2
General Physics Experiment (II)	3.98	3
Seminar for Astrophysics	3.96	2
	Total	93
	GPA	3.85