Jiaxuan Li

Personal Data

Place and Date of Birth:	Gansu, China | 28 September 1998
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Education

September 2016–	Undergraduate Student in Astrophysics, **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

April 2018	Meritorious Winner in Mathematical Contest In Modeling (MCM/ICM).
March 2018	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.
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.
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.

Prizes and Scholarships

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

July 2017-
Advisor: Yingjie Peng

Inside-out quenching galaxies with Hα ring-like structures

We investigated galaxies with Hα 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 Hα rings are measured and good linear relations between bar length and Hα ring radius are found. We reveal that the appearance of Hα star-forming ring-like structure has a strong correlation with bar-induced activities, but not with active galactic nuclei (AGN). The majority of our Hα ring galaxy sample are galaxies which are classified as LINER with EW(Hα) < 3Å. Low luminosity AGN possibly plays a role in inside-out quenching accompanying with Hα ring-like structure. Morphological quenching and bulge show less relation with Hα 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 Astrophotography Group, Meteor Group, etc.

Languages

English: Fluent.
TOEFL iBT: 103 (Jan 28, 2018)
Reading: 30; Listening: 26; Speaking: 22; Writing: 25.
Chinese Mandarin: Mothertongue
Chinese Dingxi Accent: Fluent

Computer Skills

Skilled Language: Python, LaTeX, Mathematica
Basic Knowledge: Excel, Word, PowerPoint, Photoshop

Activities

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
April 2013	Pacific Astronomy and Engineering Summit, Hawaii, U.S.

Attended Lectures

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.
Oct. 26 2017	*The formation of the smallest galaxies* by Holger Baumgardt, 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

Exam	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	4
Lectures on The Frontiers of Modern Physics (I)	Pass	2
Mechanics	3.73	4
Advanced Mathematics (B)(I)	4.00	5
Military Theory	3.63	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**