Yunyang Li

Curriculum Vitae/Oct. 2023

CONTACT

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EDUCATION

Ph.D. Astrophysics. Johns Hopkins University. Advisor: Tobias A. Marriage	2018–2024
B.Sc. Physics. Peking University. Advisor: Joel N. Bregman	2013–2017

RESEARCH EXPERIENCE

Graduate Research Assistant	Johns Hopkins University, 2018,2020–2024
Research Assistant	Peking University, 2017–2018
Visiting Research Scholar	Univ. of Michigan, Ann Arbor, 2016–2017

RESEARCH INTERESTS

cosmic microwave background; cosmology; data analysis; statistics; high-performance computing

REFERENCES

Letter writers

Tobias A. Marriage	Professor	marriage@jhu.edu	2018 –	Johns Hopkins Univ.
Charles L. Bennett	Bloomberg Distinguished Prof.	cbennett@jhu.edu	2018 –	Johns Hopkins Univ.
Adam D. Hincks	Assistant Professor	adam.hincks@utoronto.ca	2020 –	University of Toronto

Additional references

Renxin Xu	Professor	r.x.xu@pku.edu.cn	2017 –	Peking University
Joel N. Bregman	H.D. Curtis Prof.	jbregman@umich.edu	2016 –	Univ. of Michigan, Ann Arbor

COLLABORATION

Cosmology Large Angular Scale Surveyor (CLASS) Collaboration	2018 –
Hot Universe Baryon Surveyor (HUBS) Collarboration	2018 –

SELECTED AWARDS

May-the-Fourth Scholarship	Peking University, 2016
CSC Visiting Fellowship	China Scholarship Council, 2016
Academic Excellence Award	Peking University, 2016
Social Work Award of the Year	Peking University, 2014
Mizuho Scholarship	The Affiliated High School of Peking University, 2013

TALK & PRESENTATION

Towards recovery of the largest-scale polarization with CLASS: Data Pipeline Development and First Linear Polarization Survey Results

AAS 243 Dissertation talk, LA, 2024

CLASS: Recent Progress and the 40 GHz Results `invited`	FPD Seminar, SLAC, 2023
CLASS: Recent Progress and the 40 GHz Results `invited`	W&C Seminar, JHU, 2023
CLASS: Recent Progress and the 40 GHz Results	Cosmology Group, CCA, 2023
Atmospheric Cloud Polarization	Cosmo Group, Princeton, 2023
Constraints on CMB Temperature evolution with SZ clusters `invited`	W&C Seminar, JHU, 2020
The properties of the Galactic hot gaseous halo from X-ray emission	AAS 231, DC, 2018
Is Calvera a strangeon star?	AAS 231, DC, 2018
The hot gaseous halo of the Milky Way including radiative transfer effects	AAS 229, TX, 2017

TEACHING

| Introduction to Galaxies and Active Galactic Nuclei (TA, 171.314) | Johns Hopkins Univ., Spring, 2020 |
| Introduction to Galaxies and Active Galactic Nuclei (TA, 171.314) | Johns Hopkins Univ., Spring, 2020 |

Introduction to Galaxies and Active Galactic Nuclei (TA, 171.314) — Johns Hopkins Univ., Spring, 2020
General Physics/Lab II (TA, 171.104) — Johns Hopkins Univ., Spring, 2019

OUTREACH

Johns Hopkins Physics Fair — Baltimore, MD, 2019
Introduction to Astronomy and Physics — Tangnan Second Middle School, Jiangxi, 2014

PUBLICATIONS

AS FIRST AUTHOR

5. CLASS Observation of Atmospheric Cloud Polarization at Millimeter Wavelengths
YL & CLASS Collaboration
`ApJ Accepted`

4. CLASS Data Pipeline and Maps for 40 GHz Observations through 2022
YL & CLASS Collaboration
`ApJ 956, 77 (2023)`

3. Constraining Cosmic Microwave Background Temperature Evolution With Sunyaev–Zel'Dovich Galaxy Clusters from the Atacama Cosmology Telescope
YL; Hincks, Adam D. & ACT Collaboration
`ApJ 922, 136 (2021)`

2. Calvera: a low-mass strangeon star torqued by debris disk?
YL; Wang, Weiyang; Ge, Mingyu; Liu, Xiongwei; Tong, Hao; Xu, Renxin
`ApJ 854, 165 (2018)`

1. The properties of the Galactic hot gaseous halo from X-ray emission
YL & Bregman, Joel N.
`ApJ 849, 105 (2017)`

AS CONTRIBUTING COAUTHOR

5. CLASS Angular Power Spectra and Map-Component Analysis for 40 GHz Observations through 2022
Eimer, Joseph R.; **YL** & CLASS Collaboration
`Submitted to ApJ`

4. Cosmology Large Angular Scale Surveyor (CLASS): 90 GHz Telescope Pointing, Beam Profile, Window Function, and Polarization Performance
Datta, Rahul; Brewer, Michael K.; Denes Couto, Jullianna; Eimer, Joseph R.; **YL** & CLASS Collaboration
`Submitted to ApJS`

3. Two-year Cosmology Large Angular Scale Surveyor (CLASS) Observations: 40 GHz Telescope Pointing, Beam Profile, Window Function, and Polarization Performance
Xu, Zhilei; Brewer, Michael K.; Fluxá Rojas, Pedro; **YL** & CLASS Collaboration
`ApJ 891, 134 (2020)`

2. Two-year Cosmology Large Angular Scale Surveyor (CLASS) Observations: A Measurement of Circular Polarization at 40 GHz
Padilla, Ivan L.; Eimer, Joseph R.; **YL** & CLASS Collaboration
`ApJ 889, 105 (2020)`

1. The optical/UV excess of X-ray-dim isolated neutron star II. nonuniformity of plasma on strangeon star surface
Wang, Weiyang; Feng, Yi; Lai, Xiaoyu; **YL**; Lu, Jiguang; Chen, Xuelei; Xu, Renxin
`RNN 18, 082 (2018)`

REVIEW/ADVISORY CONTRIBUTION

7. Microwave Observations of Venus with CLASS
Dahal, Sumit & **CLASS Collaboration**
`PSJ 4, 154 (2023)`

6. Testing CMB Anomalies in E-mode Polarization with Current and Future Data
Shi, Rui & **CLASS Collaboration**
`ApJ 945, 79 (2023)`

5. Four-year Cosmology Large Angular Scale Surveyor (CLASS) Observations: On-sky Receiver Performance at 40, 90, 150, and 220 GHz Frequency Bands

Dahal, Sumit & **CLASS Collaboration**
`ApJ 926, 33 (2022)`

4. Two Year Cosmology Large Angular Scale Surveyor (CLASS) Observations: Long Timescale Stability Achieved with a Front-end Variable-delay Polarization Modulator at 40 GHz
Harrington, Kathleen & **CLASS Collaboration**
`ApJ 922, 212 (2021)`

3. Calibration of Transition-edge Sensor (TES) Bolometer Arrays with Application to CLASS
Appel, John W. & **CLASS Collaboration**
`ApJS 262, 52 (2022)`

2. The extended distribution of baryons around galaxies
Bregman, Joel N.; Anderson, Michael E.; Miller, Matthew J.; Hodges-Kluck, Edmund; Dai, Xinyu; Li, Jiang-tao; **YL**; Qu, Zhijie
`ApJ 862, 003 (2018)`

1. Merging strangeon stars
Lai, Xiaoyu; Yu, Yunwei; Zhou, Enping; **YL**; Xu, Renxin
`RNN 18, 024 (2018)`