

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. jlbregman@umich.edu 2016 –	Univ. of Michigan, Ann Arbor

COLLABORATION

Cosmology Large Angular Scale Surveyor (CLASS) Collaboration	2018 –
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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	Peking University, 2014
Mizuho Scholarship	The Affiliated High School of Peking University, 2013

TALK & PRESENTATION

<i>Towards recovery of the largest-scale polarization with CLASS: Data Pipeline Development and First Linear Polarization Survey Results</i>	AAS 243 Dissertation Talk, New Orleans, 2024
<i>Accessing the largest-scale microwave polarization with CLASS</i> <small>invited</small>	Dicke Candidate Seminar, Princeton, 2023
<i>CLASS: Recent Progress and the 40 GHz Results</i> <small>invited</small>	FPD Seminar, SLAC, 2023
<i>CLASS: Recent Progress and the 40 GHz Results</i> <small>invited</small>	W&C Seminar, JHU, 2023
<i>CLASS: Recent Progress and the 40 GHz Results</i>	Cosmology Group, CCA, 2023
<i>Atmospheric Cloud Polarization</i>	Cosmo Group, Princeton, 2023
<i>Constraints on CMB Temperature evolution with SZ clusters</i> <small>invited</small>	W&C Seminar, JHU, 2020
<i>The properties of the Galactic hot gaseous halo from X-ray emission</i>	AAS 231, DC, 2018
<i>Is Calvera a strangeon star?</i>	AAS 231, DC, 2018
<i>The hot gaseous halo of the Milky Way including radiative transfer effects</i>	AAS 229, Grapevine, 2017

TEACHING

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
Introduction to Astronomy and Physics

Baltimore, MD, 2019
Tangnan Second Middle School, Jiangxi, 2014

PUBLICATIONS  

h-index 8, citations 296

AS FIRST AUTHOR

5. CLASS Observation of Atmospheric Cloud Polarization at Millimeter Wavelengths
YL & CLASS Collaboration
ApJ in press
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, Xuele; 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)