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EDUCATION

Ph.D. Astrophysics. Johns Hopkins University. Advisor: Tobias A. Marriage2018–2024
B.Sc. Physics. Peking University. Advisor: Joel N. Bregman2013–2017

RESEARCH EXPERIENCE

Graduate Research AssistantJohns Hopkins University, 2018,2020–2024
Research AssistantPeking University, 2017–2018
Visiting Research ScholarUniv. of Michigan, Ann Arbor, 2018, Jan-Feb
Visiting Research ScholarUniv. of Michigan, Ann Arbor, 2016, Sep-Dec

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





COLLABORATION

Cosmology Large Angular Scale Surveyor (CLASS) Collaboration2018 –

SELECTED AWARDS

May-the-Fourth ScholarshipPeking University, 2016
CSC Visiting FellowshipChina Scholarship Council, 2016
Academic Excellence AwardPeking University, 2016
Social Work AwardPeking University, 2014
Mizuho ScholarshipThe 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, New Orleans, 2024
Accessing the largest-scale microwave polarization with CLASS  Dicke Candidate Seminar, Princeton, 2023
CLASS: Recent Progress and the 40 GHz Results  FPD Seminar, SLAC, 2023
CLASS: Recent Progress and the 40 GHz Results  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  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, 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

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, 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)