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U.S. Citizen

Education

Columbia University in the City of New York

Degree: Ph.D. 2014. Major: Astronomy and Astrophysics. Advisor: Greg L. Bryan

Purple Mountain Observatory, Chinese Academy of Sciences

Degree: M.S. 2008. Major: Astronomy and Astrophysics. Advisor: Daming Wei

Nanjing University, China

Degree: B.S. 2005. Major: Atmospheric Science

Professional Experience

Assistant Professor, University of North Texas (2020 - present).

TAC Postdoc Fellow, University of California, Berkeley (2018 - 2020).

Flatiron Research Fellow, Center for Computational Astrophysics, Flatiron Institute (2017 - 2018).

Research Fellow, University of Michigan, Department of Astronomy (2014 - 2017).

Research Interests

Galaxy clusters and massive galaxies; black hole accretion and AGN feedback; star formation and galaxy evolution; the interstellar medium, the circum-galactic medium and the intra-cluster medium.

Approved Grants

PI on NASA's Chandra Observatory theory grant "Probing Cluster Plasma Physics with Simulations of Jellyfish Tails" (Cycle 24, Proposal 24800110), \$55,000 (2023).

PI on NSF Partnerships in Astronomy & Astrophysics Research and Education (PAARE) grant AST-2219686 "Collaborative Research: Building a Team for EXtragalactic ASTrophysics (TEXAS) in the Dallas-Fort Worth Metroplex", \$185,257 (2022-2024).

PI on NASA Astrophysics Theory Program grant 21-ATP21-0072 "Connecting Galaxies and Supermassive Black Holes: Meso-scale Simulations of Multiphase Accretion Flows", \$326,875 (2022-2025).

PI on NSF Astronomy & Astrophysics grant "Collaborative Research: A Systematic and Comprehensive Study of Black Hole-Driven Turbulence in Massive Galactic Systems" (AST-2107735), \$282,654 (2021-2024).

Co-PI on UNT College of Science Seed Grant "Characterising the Warm Envelop Surrounding the Milky Way Disk With Machine Learning", \$10,000 (2021).

PI on UNT College of Science Seed Grant "Turbulence in Star Forming Clouds", \$9,000 (2021).

PI on NASA's Chandra Observatory theory grant "The Role of Magnetic Fields in Cool-Core Clusters" (Cycle 19, Proposal 19800492), ~ 60 k (2018).

Supercomputing Awards

PI on “Meso-scale Simulations Of Multiphase Accretion Flows”.

Resource Name: NASA Pleiades. Proposal Number: SMD-21-70386558. Awarded Amount: 125,000.00 SUs. Start Date: 2022-07-01; End Date: 2025-06-30.

PI on “Modeling Supermassive Black Hole Feeding and Feedback in Massive Galaxies and Galaxy Clusters”.

Resource Name: XSEDE Purdue Anvil. Proposal Number: PHY220053 New. Awarded Amount: 2,235,000.0 SUs. Start Date: 2022-07-01; End Date: 2023-12-31.

Co-I on “Numerical Self-Similar Solutions of Relativistic Jets and their Interaction with a Surrounding Medium”.

Resource Name: TACC Dell/Intel Knights Landing, Skylake System. Proposal Number: AST190033. Awarded Amount: 23,774.00 SUs. Start Date: 2019-10-01; End Date: 2020-09-30.

PI on “The Role of Magnetic Fields in Cool-core Clusters”.

Resource Name: NASA Pleiades. Proposal Number: HEC-SMD-19-2293. Awarded Amount: 150,000.00 SUs. Start Date: 2019-03-01; End Date: 2020-02-29.

PI on “Modeling Supermassive Black Hole Feedback in Massive Elliptical Galaxies”.

Resource Name: XSEDE LSU Cluster (superMIC). Proposal Number: TG-AST150041. Awarded Amount: 494,770.44 SUs. Start Date: 2017-01-01; End Date: 2017-12-31.

PI on “Modeling Supermassive Black Hole Feedback in Elliptical Galaxies”.

Resource Name: XSEDE LSU Cluster (superMIC). Proposal Number: TG-AST150041. Awarded Amount: 840,000.00 SUs. Start Date: 2015-10-01; End Date: 2016-09-30.

Observational Proposals

Co-I on the ALMA proposal 2017.1.01205.S “The Role and Origin of Dust in a Feedback-Induced BCG Starburst”.

Co-I on the ALMA proposal 2016.1.00784.S “Tracking the Origin of Dust and Molecular Gas in an Extreme Feedback-Induced BCG Starburst”.

Teaching

UNT:

Physics 5610 “Selected Topics in Modern Physics: Frontiers of Astrophysics”, Spring 2023.

Physics 1062 “Stars and The Universe”, Fall 2022.

Physics 4980 “Galaxies and Cosmology”, Fall 2021.

Physics 1210 “Conceptual Physics”, Spring 2021.

Columbia:

Head TA of Department of Astronomy and Astrophysics, Columbia University, 2011 – 2012.

C1903 (Astronomy Lab I) “Earth, Moon & Planets” & C1904 (Astronomy Lab II) “Beyond the Solar System”, Columbia University, 2008 – 2011.

Students Advised/Co-advised

Jace Singh (Ph.D. student, UNT), **Jake Reinheimer** (Ph.D. student, UNT), **Trung Ha** (Ph.D. student, UNT), **Jeremy Gingrich** (Ph.D. student, UNT), **Mirielle Caradonna** (undergraduate student, UNT), **Violet Forbes** (undergraduate student, UNT), **Alia Naciri** (undergraduate student, UNT), **Daniel Rangel** (undergraduate student, UNT), **Michael Jennings** (undergraduate student, UC Berkeley), **Richard Pan**, **Brockton Stover** (undergraduate student, UC Berkeley), **Nick Choksi** (Ph.D. student, UC Berkeley), **Rachel Salmon** (Ph.D. student, Michigan State University), **Yihuan Di** (Ph.D. student, Shanghai Observatory), **Corey Brummel-Smith** (Ph.D. student, Georgia Institute of Technology), **Cassandra Lochhaas** (Ph.D. student, the Ohio State University), **Yu Qiu** (Ph.D. student, Georgia Institute of Technology), **Chaoran Wang** (Ph.D. student, University of Michigan).

Outreach

Speaker of the Ask an Astronomer streaming program at UNT, 2020 – present.

JWST Subject Matter Expert for NASA’s Webb Space Telescope Community Events, 2021.

Volunteer and lecturer of Astronomy Talks at Berkeley Public Library, 2019.

Organizer of the Astronomy Public Outreach Program “Astronomy on Tap” in Ann Arbor, 2015 – 2016.

Volunteer and lecturer of Columbia Astronomy Public Outreach Program, including “Public Lectures and Stargazing Nights”, “Family Astro”, and “Sidewalk Astronomy in Harlem”, 2008 – 2014.

Lecturer of Middle School Outreach Program in New York, 2011 – 2014.

Scientific Activities

Referee for the Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, and Astronomy & Astrophysics.

Developer and contributor of the *Enzo* adaptive mesh refinement simulation code (<http://enzo-project.org>) and the analysis and visualization tool *yt* (<http://yt-project.org>).

Invited panelist on the Chandra panel review (2022).

Invited panelist on the NASA ATP panel review (2021).

Invited panelist on the NSF panel review (2017 & 2019).

Member of the scientific organizing committee of the COSPAR 2020 meeting: probing energy extraction from supermassive black holes (2019).

Organizer of the CCA Cluster Workshop (May 2018).

Publications

Journal Articles:

- [1] *Arkenstone I: A Novel Method for Robustly Capturing High Specific Energy Outflows In Cosmological Simulations*,
Smith, M. C., Fielding, D. B., Bryan, G. L., Kim, C.-G., Ostriker, E. C., Somerville, R. S., Stern, J., Su, K.-Y., Weinberger, R., Hu, C.-Y., Forbes, J. C., Hernquist, L., Burkhardt, B., and **Li, Yuan** 2023, arXiv e-prints, arXiv:2301.07116

- [2] *Active galactic nucleus jet feedback in hydrostatic halos*, Weinberger, R., Su, K.-Y., Ehlert, K., Pfrommer, C., Hernquist, L., Bryan, G. L., Springel, V., **Li, Yuan**, Burkhardt, B., Choi, E., and Faucher-Giguère, C.-A. 2022, arXiv e-prints, arXiv:2211.11771
- [3] *AGN Feedback in Groups and Clusters of Galaxies*, Hlavacek-Larrondo, J., **Li, Yuan**, and Churazov, E. 2022, arXiv e-prints, arXiv:2206.00098
- [4] *Code Comparison in Galaxy Scale Simulations with Resolved Supernova Feedback: \Lagrangian vs. Eulerian Methods*, Hu, C.-Y., Smith, M. C., Teyssier, R., Bryan, G. L., Verbeke, R., Emerick, A., Somerville, R. S., Burkhardt, B., **Li, Yuan**, Forbes, J. C., and Starckenburg, T. 2022, arXiv e-prints, arXiv:2208.10528
- [5] *Numerical Investigation of Dynamical and Morphological Trends in Relativistic Jets*, Mandal, S., Duffell, P. C., and **Li, Yuan** 2022, ApJ, 935, 42
- [6] *Tracing the kinematics of the whole ram pressure stripped tails in ESO 137-001*, Luo, R., Sun, M., Jáchym, P., Waldron, W., Fossati, M., Fumagalli, M., Boselli, A., Combes, F., Kenney, J. D. P., Li, Y., and Gronke, M. 2022, arXiv e-prints, arXiv:2212.03891
- [7] *Supermassive black holes in cosmological simulations - II: the AGN population and predictions for upcoming X-ray missions*, Habouzit, M., Somerville, R. S., **Li, Yuan**, Genel, S., Aird, J., Anglés-Alcázar, D., Davé, R., Georgiev, I. Y., McAlpine, S., Rosas-Guevara, Y., Dubois, Y., Nelson, D., Banados, E., Hernquist, L., Peirani, S., and Vogelsberger, M. 2022, MNRAS, 509, 3015
- [8] *Turbulence in Milky Way Star-forming Regions Traced by Young Stars and Gas*, Ha, T.*¹, **Li, Yuan**, Kounkel, M., Xu, S., Li, H., and Zheng, Y. 2022, ApJ, 934, 7
- [9] *Measuring Turbulence with Young Stars in the Orion Complex*, Ha, T.*, **Li, Yuan**, Xu, S., Kounkel, M., and Li, H. 2021, ApJL, 907, L40
- [10] *Supermassive black holes in cosmological simulations I: $M_{BH} - M_*$ relation and black hole mass function*, Habouzit, M., **Li, Yuan**, Somerville, R. S., Genel, S., Pillepich, A., Volonteri, M., Davé, R., Rosas-Guevara, Y., McAlpine, S., Peirani, S., Hernquist, L., Anglés-Alcázar, D., Reines, A., Bower, R., Dubois, Y., Nelson, D., Pichon, C., and Vogelsberger, M. 2021, MNRAS, 503, 1940
- [11] *Thermal Instability and Multiphase Gas in the Simulated Interstellar Medium with Conduction, Viscosity and Magnetic Fields*, Jennings, R. M.* and **Li, Yuan**, 2021, MNRAS, 505, 5238
- [12] *The formation of dusty cold gas filaments from galaxy cluster simulations*, Qiu, Y.*, Bogdanović, T., **Li, Yuan**, McDonald, M., and McNamara, B. R. 2020, Nature Astronomy, 4, 900
- [13] *A Black Hole Feedback Valve in Massive Galaxies*, Voit, G. M., Bryan, G. L., Prasad, D., Frisbie, R., **Li, Yuan**, Donahue, M., O’Shea, B. W., Sun, M., and Werner, N. 2020, ApJ, 899, 70
- [14] *Correlations between Black Holes and Host Galaxies in the Illustris and IllustrisTNG Simulations*, **Li, Yuan**, Habouzit, M., Genel, S., Somerville, R., Terrazas, B. A., Bell, E. F., Pillepich, A., Nelson, D., Weinberger, R., Rodriguez-Gomez, V., Ma, C.-P., Pakmor, R., Hernquist, L., and Vogelsberger, M. 2020, ApJ, 895, 102
- [15] *Direct Detection of Black Hole-driven Turbulence in the Centers of Galaxy Clusters*, **Li, Yuan**, Gendron-Marsolais, M.-L., Zhuravleva, I., Xu, S., Simionescu, A., Tremblay, G. R., Lochhaas, C., Bryan, G. L., Quataert, E., Murray, N. W., Boselli, A., Hlavacek-Larrondo, J., Zheng, Y., Fossati, M., Li, M., Emsellem, E., Sarzi, M., Arzamaschiy, L., and Vishniac, E. T. 2020, ApJL, 889, L1

¹student mentored by Yuan Li

- [16] *First results from SMAUG: Uncovering the Origin of the Multiphase Circumgalactic Medium with a Comparative Analysis of Idealized and Cosmological Simulations*,
Fielding, D. B., Tonnesen, S., DeFelippis, D., Li, M., Su, K.-Y., Bryan, G. L., Kim, C.-G., Forbes, J. C., Somerville, R. S., Battaglia, N., Schneider, E. E., **Li, Yuan**, Choi, E., Hayward, C. C., and Hernquist, L. 2020, arXiv e-prints, arXiv:2006.16316
- [17] *Probing Magnetic Field Morphology in Galaxy Clusters with the Gradient Technique*,
Hu, Y.* , Lazarian, A., **Li, Yuan**, Zhuravleva, I., and Gendron-Marsolais, M.-L. 2020, arXiv e-prints, arXiv:2007.06219
- [18] *Properties of the Hot Ambient Medium of Early-type Galaxies Hosting Powerful Radio Sources*,
Frisbie, R. L. S.* , Donahue, M., Voit, G. M., Connor, T., **Li, Yuan**, Sun, M., Lakhchaura, K., Werner, N., and Grossova, R. 2020, ApJ, 899, 159
- [19] *Properties of the Simulated Circumgalactic Medium*,
Lochhaas, C.* , Bryan, G. L., **Li, Yuan**, Li, M., and Fielding, D. 2020, MNRAS, 324
- [20] *The Impact of Type Ia Supernovae in Quiescent Galaxies. I. Formation of the Multiphase Interstellar Medium*,
Li, M., **Li, Yuan**, Bryan, G. L., Ostriker, E. C., and Quataert, E. 2020, ApJ, 894, 44
- [21] *The Impact of Type Ia Supernovae in Quiescent Galaxies. II. Energetics and Turbulence*,
Li, M., **Li, Yuan**, Bryan, G. L., Ostriker, E. C., and Quataert, E. 2020, ApJ, 898, 23
- [22] *The relationship between black hole mass and galaxy properties: examining the black hole feedback model in IllustrisTNG*,
Terrazas, B. A., Bell, E. F., Pillepich, A., Nelson, D., Somerville, R. S., Genel, S., Weinberger, R., Habouzit, M., **Li, Yuan**, Hernquist, L., and Vogelsberger, M. 2020, MNRAS, 493, 1888
- [23] *ENZO: An Adaptive Mesh Refinement Code for Astrophysics (Version 2.6)*,
Brummel-Smith, C.* , Bryan, G., Butsky, I., Corlies, L., Emerick, A., Forbes, J., Fujimoto, Y., Goldbaum, N., Grete, P., Hummels, C., Kim, J.-h., Koh, D., Li, M., **Li, Yuan**, Li, X., OShea, B., Peebles, M., Regan, J., Salem, M., Schmidt, W., Simpson, C., Smith, B., Tumlinson, J., Turk, M., Wise, J., Abel, T., Bordner, J., Cen, R., Collins, D., Crosby, B., Edelman, P., Hahn, O., Harkness, R., Harper-Clark, E., Kong, S., Kritsuk, A., Kuhlen, M., Larrue, J., Lee, E., Meece, G., Norman, M., Oishi, J., Paschos, P., Peruta, C., Razoumov, A., Reynolds, D., Silvia, D., Skillman, S., Skory, S., So, G., Tasker, E., Wagner, R., Wang, P., Xu, H., and Zhao, F. 2019, The Journal of Open Source Software, 4, 1636
- [24] *AGN feedback and multiphase gas in giant elliptical galaxies*,
Wang, C.* , **Li, Yuan**, and Ruszkowski, M. 2019, MNRAS, 482, 3576
- [25] *Clocking the formation of today’s largest galaxies: Wide field integral spectroscopy of Brightest Cluster Galaxies and their surroundings*,
Edwards, L. O. V., Salinas, M., Stanley, S., West, P. E. H., Trierweiler, I., Alpert, H., Coelho, P., Koppaka, S., Tremblay, G. R., Martel, H., and **Li, Yuan** 2019, MNRAS, 2328
- [26] *The Dust and Molecular Gas in the Brightest Cluster Galaxy in MACS 1931.8-2635*,
Fogarty, K., Postman, M., **Li, Yuan**, Dannerbauer, H., Liu, H. B., Donahue, M., Ziegler, B., Koekemoer, A., and Frye, B. 2019, ApJ, 879, 103
- [27] *The Interplay of Kinetic and Radiative Feedback in Galaxy Clusters*,
Qiu, Y.* , Bogdanović, T., **Li, Yuan**, Park, K., and Wise, J. H. 2019, ApJ, 877, 47
- [28] *Using H α Filaments to Probe Active Galactic Nuclei Feedback in Galaxy Clusters*,
Qiu, Y.* , Bogdanović, T., **Li, Yuan**, and McDonald, M. 2019, ApJL, 872, L11
- [29] *The Fate of Asymptotic Giant Branch Winds in Massive Galaxies and the Intracluster Medium*,
Li, Yuan, Bryan, G. L., and Quataert, E. 2019, ApJ, 887, 41

- [30] *A Galaxy-scale Fountain of Cold Molecular Gas Pumped by a Black Hole*, Tremblay, G. R., Combes, F., Oonk, J. B. R., Russell, H. R., McDonald, M. A., Gaspari, M., Husemann, B., Nulsen, P. E. J., McNamara, B. R., Hamer, S. L., O’Dea, C. P., Baum, S. A., Davis, T. A., Donahue, M., Voit, G. M., Edge, A. C., Blanton, E. L., Bremer, M. N., Bulbul, E., Clarke, T. E., David, L. P., Edwards, L. O. V., Eggerman, D., Fabian, A. C., Forman, W., Jones, C., Kerman, N., Kraft, R. P., **Li, Yuan**, Powell, M., Randall, S. W., Salomé, P., Simionescu, A., Su, Y., Sun, M., Urry, C. M., Vantyghem, A. N., Wilkes, B. J., and ZuHone, J. A. 2018, *ApJ*, 865, 13
- [31] *The Effects of Ram Pressure on the Cold Clouds in the Centers of Galaxy Clusters*, **Li, Yuan**, Ruszkowski, M., and Tremblay, G. 2018, *ApJ*, 854, 91
- [32] *A Global Model for Circumgalactic and Cluster-core Precipitation*, Voit, G. M., Meece, G., **Li, Yuan**, O’Shea, B. W., Bryan, G. L., and Donahue, M. 2017, *ApJ*, 845, 80
- [33] *AGN Heating in Simulated Cool-core Clusters*, **Li, Yuan**, Ruszkowski, M., and Bryan, G. L. 2017, *ApJ*, 847, 106
- [34] *Cold, clumpy accretion onto an active supermassive black hole*, Tremblay, G. R., Oonk, J. B. R., Combes, F., Salomé, P., O’Dea, C. P., Baum, S. A., Voit, G. M., Donahue, M., McNamara, B. R., Davis, T. A., McDonald, M. A., Edge, A. C., Clarke, T. E., Galván-Madrid, R., Bremer, M. N., Edwards, L. O. V., Fabian, A. C., Hamer, S., **Li, Yuan**, Maury, A., Russell, H. R., Quillen, A. C., Urry, C. M., Sanders, J. S., and Wise, M. W. 2016, *Nature*, 534, 218
- [35] *Cooling, AGN Feedback, and Star Formation in Simulated Cool-core Galaxy Clusters*, **Li, Yuan**, Bryan, G. L., Ruszkowski, M., Voit, G. M., O’Shea, B. W., and Donahue, M. 2015, *ApJ*, 811, 73
- [36] *Far-ultraviolet morphology of star-forming filaments in cool core brightest cluster galaxies*, Tremblay, G. R., O’Dea, C. P., Baum, S. A., Mittal, R., McDonald, M. A., Combes, F., **Li, Yuan**, McNamara, B. R., Bremer, M. N., Clarke, T. E., Donahue, M., Edge, A. C., Fabian, A. C., Hamer, S. L., Hogan, M. T., Oonk, J. B. R., Quillen, A. C., Sanders, J. S., Salomé, P., and Voit, G. M. 2015, *MNRAS*, 451, 3768
- [37] *Ultraviolet Morphology and Unobscured UV Star Formation Rates of CLASH Brightest Cluster Galaxies*, Donahue, M., Connor, T., Fogarty, K., **Li, Yuan**, Voit, G. M., Postman, M., Koekemoer, A., Moustakas, J., Bradley, L., and Ford, H. 2015, *ApJ*, 805, 177
- [38] *ENZO: An Adaptive Mesh Refinement Code for Astrophysics*, Bryan, G. L., Norman, M. L., O’Shea, B. W., Abel, T., Wise, J. H., Turk, M. J., Reynolds, D. R., Collins, D. C., Wang, P., Skillman, S. W., Smith, B., Harkness, R. P., Bordner, J., Kim, J.-h., Kuhlen, M., Xu, H., Goldbaum, N., Hummels, C., Kritsuk, A. G., Tasker, E., Skory, S., Simpson, C. M., Hahn, O., Oishi, J. S., So, G. C., Zhao, F., Cen, R., **Li, Yuan**, and Enzo Collaboration. 2014, *ApJS*, 211, 19
- [39] *Modeling Active Galactic Nucleus Feedback in Cool-core Clusters: The Balance between Heating and Cooling*, **Li, Yuan** and Bryan, G. L. 2014, *ApJ*, 789, 54
- [40] *Modeling Active Galactic Nucleus Feedback in Cool-core Clusters: The Formation of Cold Clumps*, **Li, Yuan** and Bryan, G. L. 2014, *ApJ*, 789, 153
- [41] *Simulating the Cooling Flow of Cool-core Clusters*, **Li, Yuan** and Bryan, G. L. 2012, *ApJ*, 747, 26
- [42] *Determining the Dust Extinction of Gamma-Ray Burst Host Galaxies: A Direct Method Based on Optical and X-Ray Photometry*, **Li, Yuan**, Li, A., and Wei, D. M. 2008, *ApJ*, 678, 1136

Conference proceedings, White papers, and Book Chapters:

- [1] *AGN Feedback in Groups and Clusters of Galaxies*, Hlavacek-Larrondo, J., **Li, Yuan**, and Churazov, E. 2022, arXiv e-prints, arXiv:2206.00098
- [2] *Circumgalactic Gas and the Precipitation Limit*, Voit, G. M., Babul, A., Babyk, I., Bryan, G. L., Chen, H. W., Donahue, M., Fielding, D., Gaspari, M., **Li, Yuan**, McDonald, M., O’Shea, B. W., Prasad, D., Sharma, P., Sun, M., Tremblay, G., Werk, J., Werner, N., and Zahedy, F. 2019, arXiv e-prints, arXiv:1903.11212
- [3] Wang, C.*, Ruszkowski, M., Yang, H.-Y. K., and **Li, Yuan** 2019, in AAS/High Energy Astrophysics Division, AAS/High Energy Astrophysics Division, 108.06
- [4] **Li, Yuan**, Brummel-Smith, C.*, Zhuravleva, I., and Nagai, D. 2019, in AAS/High Energy Astrophysics Division, AAS/High Energy Astrophysics Division, 106.19
- [5] Li, M., **Li, Yuan**, Bryan, G., Ostriker, E. C., and Quataert, E. 2019, in American Astronomical Society Meeting Abstracts, Vol. 233, American Astronomical Society Meeting Abstracts #233, 145.24
- [6] Qiu, Y.*, Bogdanovic, T., **Li, Yuan**, Park, K., and Wise, J. H. 2019, in American Astronomical Society Meeting Abstracts, Vol. 233, American Astronomical Society Meeting Abstracts #233, 438.06
- [7] Qiu, Y.*, Bogdanovic, T., **Li, Yuan**, and McDonald, M. 2019, in AAS/High Energy Astrophysics Division, AAS/High Energy Astrophysics Division, 107.07
- [8] *Supermassive Black Hole Feedback*, Ruszkowski, M., Nagai, D., Zhuravleva, I., Brummel-Smith, C., **Li, Yuan**, Hodges-Kluck, E., Yang, H.-Y. K., Basu, K., Chluba, J., Churazov, E., Donahue, M., Fabian, A., Faucher-Giguère, C.-A., Gaspari, M., Hlavacek-Larrondo, J., McDonald, M., McNamara, B., Nulsen, P., Mroczkowski, T., Mushotzky, R., Reynolds, C., Vikhlinin, A., Voit, M., Werner, N., ZuHone, J., and Zweibel, E. 2019, BAAS, 51, 326
- [9] Livermore, R. C., Morris, B., Narayan, G., Morrison, S. J., Schneider, E., Bozek, B., Rice, E. L., Hummels, C. B., Garofali, K., Martinez, R., **Li, Yuan**, Green, J. D., LaMassa, S. M., Silvia, D. W., Schwamb, M. E., Arcavi, I., and Silverman, J. M. 2017, in American Astronomical Society Meeting Abstracts, Vol. 229, American Astronomical Society Meeting Abstracts #229, 335.11
- [10] **Li, Yuan**, Bryan, G., and Ruszkowski, M. 2015, in American Astronomical Society Meeting Abstracts, Vol. 225, American Astronomical Society Meeting Abstracts #225, 439.02
- [11] **Li, Yuan** and Enzo. 2014, in American Astronomical Society Meeting Abstracts, Vol. 223, American Astronomical Society Meeting Abstracts #223, 106.02
- [12] **Li, Yuan** and Bryan, G. L. 2012, in American Astronomical Society Meeting Abstracts, Vol. 219, American Astronomical Society Meeting Abstracts #219, 338.18
- [13] **Li, Yuan** and Schiminovich, D. 2010, in American Astronomical Society Meeting Abstracts, Vol. 215, American Astronomical Society Meeting Abstracts #215, 435.03
- [14] *GRB 100213B: detection of fading optical afterglow.*, **Li, Yuan**, Weston, J., Fernandez, X., Brown, A., Yoon, J. H., Crotts, A. P. S., and Halpern, J. P. 2010, GRB Coordinates Network, 10913, 1
- [15] **Li, Yuan**, Li, A., and Wei, D. M. 2008 in American Institute of Physics Conference Series, Vol. 1065, e. American Institute of Physics Conference Series, 123

Scientific Talks

Seminars/Colloquia

University of Texas at Arlington, Colloquium (Oct 2022).

University of Maryland, CTC seminar (May 2022).

University of Texas at Dallas, Colloquium (March 2022).

University of Alabama in Huntsville, Colloquium (Oct 2021).

Universidad de Concepción, Colloquium (May 2021).

The Kavli Institute for Astronomy and Astrophysics (KIAA), Colloquium (May 2021).

University of Michigan, Galaxy Cluster Seminar (March 2021).

University of North Texas, Colloquium (Sept 2020).

University of California, Berkeley, Colloquium (June 2020).

University of Missouri, Kansas City, Colloquium (Feb 2020).

University of Mississippi, Colloquium (Feb 2020).

Columbia University, Lunch Talk (Dec 2019).

Massachusetts Institute of Technology, Astrophysics Brown Bag Lunch Talk (Dec 2019).

Stanford University, KIPAC Tea Talk (Nov 2019).

California Institute of Technology, TAPIR Seminar (May 2019).

University of California, Santa Cruz, Geophysical, Astrophysical Fluid Dynamics seminar (May 2019).

University of Kentucky, Astronomy Seminar (April 2019).

California Polytechnic State University, Colloquium (Nov 2018).

University of California, Berkeley, Astronomy Seminar at the Theoretical Astrophysics Center (Sep 2018).

The Space Telescope Science Institute, Colloquium (June 2018).

American Museum of Natural History (April 2018).

University of Notre Dame, Colloquium (Nov 2016).

University of Chicago, KICP Seminar (Nov 2016).

Georgia Institute of Technology, Seminar at the Center for Relativistic Astrophysics (Sep 2016).

Northwestern University, Astrophysics Seminar (Dec 2015).

University of California, Berkeley, Astronomy Seminar at the Theoretical Astrophysics Center (Sep 2015).

Michigan State University, Astronomy Seminar (April 2015).

Rutgers University, Astrophysics Seminar and Colloquium (April 2014).

U.S. Naval Research Laboratory, Washington, DC, NRL Lunch Talk (March 2014).

Yale University, Galaxy Lunch (Oct 2013).

Selected Conference Presentations

“Turbulence Traced with Multiphase Filaments in Galaxy Clusters”, American Astronomical Society, AAS Meeting, Seattle, Washington (Jan 2023).

“Turbulence in the Intracluster Medium”, 6th ICM Theory and Computation Workshop, Copenhagen, Denmark (Aug 2022).

“Multiphase Gas in the Centers of Galaxy Clusters”, KIAA Forum on Gas in Galaxies for Early Career Scientists (Nov 2021).

“Probing Microscopic Physics of Weakly Collisional Plasma in Galaxy Clusters using High Resolution Optical Observations”, National Astronomy Meeting 2021 (July 2021).

“The Fate of AGB Winds in Massive Galaxies and Galaxy Clusters”, DELVE: The Death-Throes of Evolved Stars, a Virtual Encounter (April 2021).

“Observational Measures of Halo Turbulence”, KITP Workshop on Fundamentals of Gaseous Halos (Jan 2021).

“Direct Detection of Black Hole-Driven Turbulence in the Centers of Galaxy Clusters”, 43rd COSPAR Scientific Assembly, Sydney, Australia (Jan 2021).

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