Dr. Ian Czekala

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School of Physics and Astronomy
University of St. Andrews
School Website
ORCID ID: 0000-0002-1483-8811

Phone: +44 1334 461646
Email: ic95@st-andrews.ac.uk
https://iancze.github.io/
U.S. Citizen

I am a lecturer in the School of Physics and Astronomy at the University of St. Andrews in the UK. I lead a research group that develops and employs a variety of statistical techniques to advance our understanding of the astrophysics of star and planet formation.

keywords: planet formation, astrostatistics, radio interferometry, high performance computation, spectroscopy, protoplanetary disks, exoplanets, Bayesian inference, stochastic methods, machine learning, neural networks

Professional Appointments

Jul 2023 - present	Lecturer, School of Physics and Astronomy, University of St. Andrews, UK
Aug 2020 - Jun 2023	Assistant Professor, Department of Astronomy and Astrophysics ICDS Co-Hire, Institute for Computational and Data Sciences Pennsylvania State University; University Park, PA USA
2018 - 2020	NASA Hubble Fellowship Program (NHFP) Sagan Postdoctoral Fellow University of California Berkeley; Berkeley, CA USA
2016 - 2018	Porat Postdoctoral Fellow Kavli Institute for Particle Astrophysics and Cosmology Stanford University; Stanford, CA USA
2010 - 2016	Graduate Student Harvard University; Cambridge, MA USA

Education

2012 - 2016	*Ph.D.* in Astrophysics, Harvard University, Cambridge, MA advisor Sean M. Andrews
2010 - 2012	*Masters of Arts* in Astronomy and Astrophysics, Harvard University advisor Edo Berger
2006 - 2010	*Bachelor of Science*, Aerospace Engineering, Astronomy, University of Virginia Jefferson Scholar, Graduated with High Distinction

Research Appointments

2018 - 2020	*Architectures and Dynamics of Protoplanetary Systems*, Postdoctoral Advisor Eugene Chiang
2016 - 2018	*Disk and Stellar Dynamics of Pre-Main Sequence Systems*, Postdoctoral Advisor Bruce Macintosh
2013 - 2016	**Ph.D. Thesis**: *The Fundamental Properties of Young Stars*, CfA, advised by Sean Andrews
2012	*MMTCam Commissioning*, Harvard-Smithsonian CfA, advised by Warren Brown
2010 - 2012	**Masters project**: *Intermediate Luminosity Transients*, Harvard University, advised by Edo Berger
2009 - 2010	*PAPER Instrumentation Study*, University of Virginia, advised by Richard Bradley
2009 - 2010	*ALMA Collaborative Engineering Study*, Santiago, Chile advised by Kelsey Johnson and Alison Peck
2009	*Circumstellar Disks*, Smithsonian Astrophysical Observatory REU Intern advised by Sean Andrews

Honors and Awards

2018 - 2020	*NASA Hubble Postdoctoral Fellowship*
2016 - 2018	*Porat Postdoctoral Fellowship, Stanford KIPAC*
2013, 2014	*(2) Certificates of Distinction in Teaching*, Harvard University
2011 - 2016	NSF *Graduate Research Fellowship*
2006 - 2010	*Jefferson Scholar*, UVA, full scholarship
2006 - 2010	*Rodman Scholar*, UVA
2010	*Outstanding SEAS Student*, UVA
2010	*Louis T. Rader* Award for Mechanical and Aerospace Engineering School of Engineering and Applied Sciences, UVA
2010	*21 Society Fourth Year Recognition*, UVA
2010	*Limber Award*, UVA Astronomy Department

Refereed Publication Summary

First author: 9 / total: 68 / citations: 4905 / h-index: 41 / (2024-06-10) [link]

Selected Refereed Publications

12. Zawadzki, Brianna; **Czekala, Ian**; Loomis, Ryan A.; Quinn, Tyler; *et al.*, *Regularized Maximum Likelihood Image Synthesis and Validation for ALMA Continuum Observations of Protoplanetary Disks*, Publications of the Astronomical Society of the Pacific, Volume 135, Issue 1048, id.064503, 24 pp., Citations: 3

11. **Czekala, Ian**; Loomis, Ryan A.; Teague, Richard; Booth, Alice S.; *et al.*, *Molecules with ALMA at Planet-forming Scales (MAPS). II. CLEAN Strategies for Synthesizing Images of Molecular Line Emission in Protoplanetary Disks*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.2, 19 pp., Citations: 76

10. **Czekala, Ian**; Ribas, Álvaro; Cuello, Nicolás; Chiang, Eugene; *et al.*, *A Coplanar Circumbinary Protoplanetary Disk in the TWA 3 Triple M Dwarf System*, The Astrophysical Journal, Volume 912, Issue 1, id.6, 13 pp., Citations: 22

9. Pegues, Jamila; **Czekala, Ian**; Andrews, Sean M.; Öberg, Karin I.; *et al.*, *Dynamical Masses and Stellar Evolutionary Model Predictions of M Stars*, The Astrophysical Journal, Volume 908, Issue 1, id.42, 20 pp., Citations: 20

8. **Czekala, Ian**; Chiang, Eugene; Andrews, Sean M.; Jensen, Eric L. N.; *et al.*, *The Degree of Alignment between Circumbinary Disks and Their Binary Hosts*, The Astrophysical Journal, Volume 883, Issue 1, article id. 22, 24 pp. (2019)., Citations: 84

7. **Czekala, Ian**; Andrews, Sean M.; Torres, Guillermo; Rodriguez, Joseph E.; *et al.*, *The Architecture of the GW Ori Young Triple-star System and Its Disk: Dynamical Masses, Mutual Inclinations, and Recurrent Eclipses*, The Astrophysical Journal, Volume 851, Issue 2, article id. 132, 20 pp. (2017)., Citations: 28

6. **Czekala, Ian**; Mandel, Kaisey S.; Andrews, Sean M.; Dittmann, Jason A.; *et al.*, *Disentangling Time-series Spectra with Gaussian Processes: Applications to Radial Velocity Analysis*, The Astrophysical Journal, Volume 840, Issue 1, article id. 49, 19 pp. (2017)., Citations: 38

5. **Czekala, Ian**; Andrews, S. M.; Torres, G.; Jensen, E. L. N.; *et al.*, *A Disk-based Dynamical Constraint on the Mass of the Young Binary DQ Tau*, The Astrophysical Journal, Volume 818, Issue 2, article id. 156, 9 pp. (2016)., Citations: 56

4. **Czekala, Ian**; Andrews, Sean M.; Mandel, Kaisey S.; Hogg, David W.; *et al.*, *Constructing a Flexible Likelihood Function for Spectroscopic Inference*, The Astrophysical Journal, Volume 812, Issue 2, article id. 128, 21 pp. (2015)., Citations: 97

3. **Czekala, Ian**; Andrews, S. M.; Jensen, E. L. N.; Stassun, K. G.; *et al.*, *A Disk-based Dynamical Mass Estimate for the Young Binary AK Sco*, The Astrophysical Journal, Volume 806, Issue 2, article id. 154, 8 pp. (2015)., Citations: 78

2. **Czekala, Ian**; Berger, E.; Chornock, R.; Pastorello, A.; *et al.*, *The Unusually Luminous Extragalactic Nova SN 2010U*, The Astrophysical Journal, Volume 765, Issue 1, article id. 57, 15 pp. (2013)., Citations: 5

1. Andrews, Sean M.; **Czekala, Ian**; Wilner, D. J.; Espaillat, Catherine; *et al.*, *Truncated Disks in TW Hya Association Multiple Star Systems*, The Astrophysical Journal, Volume 710, Issue 1, pp. 462-469 (2010)., Citations: 60

All Other Refereed Publications

56. Muñoz-Romero, Carlos E.; Öberg, Karin I.; Banzatti, Andrea; Pontoppidan, Klaus M.; *et al.* (incl **IC**), *JWST-MIRI Spectroscopy of Warm Molecular Emission and Variability in the AS 209 Disk*, The Astrophysical Journal, Volume 964, Issue 1, id.36, 16 pp., Citations: 1

55. Thomas, Andrew D.; Nielsen, Eric L.; De Rosa, Robert J.; Peck, Anne E.; *et al.* (incl **IC**), *CD -27°11535: Evidence for a Triple System in the β Pictoris Moving Group*, The Astronomical Journal, Volume 166, Issue 6, id.246, 16 pp.,

54. Galloway-Sprietsma, Maria; Bae, Jaehan; Teague, Richard; Benisty, Myriam; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS): Complex Kinematics in the AS 209 Disk Induced by a Forming Planet and Disk Winds*, The Astrophysical Journal, Volume 950, Issue 2, id.147, 13 pp., Citations: 12

53. Bae, Jaehan; Teague, Richard; Andrews, Sean M.; Benisty, Myriam; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS): A Circumplanetary Disk Candidate in Molecular-line Emission in the AS 209 Disk*, The Astrophysical Journal Letters, Volume 934, Issue 2, id.L20, 16 pp., Citations: 35

52. Ruffio, Jean-Baptiste; Konopacky, Quinn M.; Barman, Travis; Macintosh, Bruce; *et al.* (incl **IC**), *Deep Exploration of the Planets HR 8799 b, c, and d with Moderate-resolution Spectroscopy*, The Astronomical Journal, Volume 162, Issue 6, id.290, 27 pp., Citations: 35

51. Serenelli, Aldo; Weiss, Achim; Aerts, Conny; Angelou, George C.; *et al.* (incl **IC**), *Weighing stars from birth to death: mass determination methods across the HRD*, The Astronomy and Astrophysics Review, Volume 29, Issue 1, article id.4, Citations: 58

50. Schwarz, Kamber R.; Calahan, Jenny K.; Zhang, Ke; Alarcón, Felipe; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales. XX. The Massive Disk around GM Aurigae*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.20, 14 pp., Citations: 29

49. Huang, Jane; Bergin, Edwin A.; Öberg, Karin I.; Andrews, Sean M.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XIX. Spiral Arms, a Tail, and Diffuse Structures Traced by CO around the GM Aur Disk*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.19, 28 pp., Citations: 43

48. Teague, Richard; Bae, Jaehan; Aikawa, Yuri; Andrews, Sean M.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XVIII. Kinematic Substructures in the Disks of HD 163296 and MWC 480*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.18, 27 pp., Citations: 65

47. Calahan, Jenny K.; Bergin, Edwin A.; Zhang, Ke; Schwarz, Kamber R.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XVII. Determining the 2D Thermal Structure of the HD 163296 Disk*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.17, 17 pp., Citations: 26

46. Booth, Alice S.; Tabone, Benoît; Ilee, John D.; Walsh, Catherine; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XVI. Characterizing the Impact of the Molecular Wind on the Evolution of the HD 163296 System*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.16, 18 pp., Citations: 23

45. Bosman, Arthur D.; Bergin, Edwin A.; Loomis, Ryan A.; Andrews, Sean M.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XV. Tracing Protoplanetary Disk Structure within 20 au*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.15, 18 pp., Citations: 23

44. Sierra, Anibal; Pérez, Laura M.; Zhang, Ke; Law, Charles J.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XIV. Revealing Disk Substructures in Multiwavelength Continuum Emission*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.14, 27 pp., Citations: 68

43. Aikawa, Yuri; Cataldi, Gianni; Yamato, Yoshihide; Zhang, Ke; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XIII. HCO^+ and Disk Ionization Structure*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.13, 22 pp., Citations: 34

42. Le Gal, Romane; Öberg, Karin I.; Teague, Richard; Loomis, Ryan A.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XII. Inferring the C/O and S/H Ratios in Protoplanetary Disks with Sulfur Molecules*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.12, 20 pp., Citations: 36

41. Bergner, Jennifer B.; Öberg, Karin I.; Guzmán, Viviana V.; Law, Charles J.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). XI. CN and HCN as Tracers of Photochemistry in Disks*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.11, 17 pp., Citations: 35

40. Cataldi, Gianni; Yamato, Yoshihide; Aikawa, Yuri; Bergner, Jennifer B.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). X. Studying Deuteration at High Angular Resolution toward Protoplanetary Disks*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.10, 44 pp., Citations: 17

39. Ilee, John D.; Walsh, Catherine; Booth, Alice S.; Aikawa, Yuri; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). IX. Distribution and Properties of the Large Organic Molecules HC_3N, CH_3CN, and c-C_3H_2*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.9, 20 pp., Citations: 39

38. Alarcón, Felipe; Bosman, Arthur D.; Bergin, Edwin A.; Zhang, Ke; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). VIII. CO Gap in AS 209-Gas Depletion or Chemical Processing?*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.8, 16 pp., Citations: 26

37. Bosman, Arthur D.; Alarcón, Felipe; Bergin, Edwin A.; Zhang, Ke; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). VII. Substellar O/H and C/H and Superstellar C/O in Planet-feeding Gas*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.7, 14 pp., Citations: 48

36. Guzmán, Viviana V.; Bergner, Jennifer B.; Law, Charles J.; Öberg, Karin I.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). VI. Distribution of the Small Organics HCN, C_2H, and H_2CO*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.6, 18 pp., Citations: 47

35. Zhang, Ke; Booth, Alice S.; Law, Charles J.; Bosman, Arthur D.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). V. CO Gas Distributions*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.5, 29 pp., Citations: 106

34. Law, Charles J.; Teague, Richard; Loomis, Ryan A.; Bae, Jaehan; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). IV. Emission Surfaces and Vertical Distribution of Molecules*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.4, 24 pp., Citations: 74

33. Law, Charles J.; Loomis, Ryan A.; Teague, Richard; Öberg, Karin I.; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). III. Characteristics of Radial Chemical Substructures*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.3, 43 pp., Citations: 73

32. Öberg, Karin I.; Guzmán, Viviana V.; Walsh, Catherine; Aikawa, Yuri; *et al.* (incl **IC**), *Molecules with ALMA at Planet-forming Scales (MAPS). I. Program Overview and Highlights*, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.1, 29 pp., Citations: 159

31. Benisty, Myriam; Bae, Jaehan; Facchini, Stefano; Keppler, Miriam; *et al.* (incl **IC**), *A Circumplanetary Disk around PDS70c*, The Astrophysical Journal Letters, Volume 916, Issue 1, id.L2, 15 pp., Citations: 142

30. Foreman-Mackey, Daniel; Luger, Rodrigo; Agol, Eric; Barclay, Thomas; *et al.* (incl **IC**), *exoplanet: Gradient-based probabilistic inference for exoplanet data & other astronomical time series*, Journal of Open Source Software, vol. 6, issue 62, id. 3285, Citations: 141

29. Ward-Duong, K.; Patience, J.; Follette, K.; De Rosa, R. J.; *et al.* (incl **IC**), *Gemini Planet Imager Spectroscopy of the Dusty Substellar Companion HD 206893 B*, The Astronomical Journal, Volume 161, Issue 1, id.5, 24 pp., Citations: 17

28. Stanford-Moore, S. Adam; Nielsen, Eric L.; De Rosa, Robert J.; Macintosh, Bruce; *et al.* (incl **IC**), *BAFFLES: Bayesian Ages for Field Lower-mass Stars*, The Astrophysical Journal, Volume 898, Issue 1, id.27, Citations: 31

27. Esposito, Thomas M.; Kalas, Paul; Fitzgerald, Michael P.; Millar-Blanchaer, Maxwell A.; *et al.* (incl **IC**), *Debris Disk Results from the Gemini Planet Imager Exoplanet Survey's Polarimetric Imaging Campaign*, The Astronomical Journal, Volume 160, Issue 1, id.24, 44 pp. (2020), Citations: 80

26. Duchêne, Gaspard; Rice, Malena; Hom, Justin; Zalesky, Joseph; *et al.* (incl **IC**), *The Gemini Planet Imager View of the HD 32297 Debris Disk*, The Astronomical Journal, Volume 159, Issue 6, id.251, 21 pp. (2020), Citations: 20

25. Loomis, Ryan A.; Öberg, Karin I.; Andrews, Sean M.; Bergin, Edwin; *et al.* (incl **IC**), *An Unbiased ALMA Spectral Survey of the LkCa 15 and MWC 480 Protoplanetary Disks*, The Astrophysical Journal, Volume 893, Issue 2, id.101, 15 pp. (2020), Citations: 42

24. Ruffio, Jean-Baptiste; Macintosh, Bruce; Konopacky, Quinn M.; Barman, Travis; *et al.* (incl **IC**), *Radial Velocity Measurements of HR 8799 b and c with Medium Resolution Spectroscopy*, The Astronomical Journal, Volume 158, Issue 5, article id. 200, 21 pp. (2019)., Citations: 52

23. Nielsen, Eric L.; De Rosa, Robert J.; Macintosh, Bruce; Wang, Jason J.; *et al.* (incl **IC**), *The Gemini Planet Imager Exoplanet Survey: Giant Planet and Brown Dwarf Demographics from 10 to 100 au*, The Astronomical Journal, Volume 158, Issue 1, article id. 13, 44 pp. (2019)., Citations: 312

22. Ruffio, Jean-Baptiste; Mawet, Dimitri; **Czekala, Ian**; Macintosh, Bruce; *et al.*, *A Bayesian Framework for Exoplanet Direct Detection and Non-detection*, The Astronomical Journal, Volume 156, Issue 5, article id. 196, 16 pp. (2018)., Citations: 19

21. Loomis, Ryan A.; Öberg, Karin I.; Andrews, Sean M.; Walsh, Catherine; *et al.* (incl **IC**), *Detecting Weak Spectral Lines in Interferometric Data through Matched Filtering*, The Astronomical Journal, Volume 155, Issue 4, article id. 182, 14 pp. (2018)., Citations: 64

20. Lunnan, R.; Chornock, R.; Berger, E.; Jones, D. O.; *et al.* (incl **IC**), *Hydrogen-poor Superluminous Supernovae from the Pan-STARRS1 Medium Deep Survey*, The Astrophysical Journal, Volume 852, Issue 2, article id. 81, 16 pp. (2018)., Citations: 101

19. Ricci, L.; Cazzoletti, P.; **Czekala, Ian**; Andrews, S. M.; *et al.*, *ALMA Observations of the Young Substellar Binary System 2M1207*, The Astronomical Journal, Volume 154, Issue 1, article id. 24, 8 pp. (2017)., Citations: 23

18. Rajan, Abhijith; Rameau, Julien; De Rosa, Robert J.; Marley, Mark S.; *et al.* (incl **IC**), *Characterizing 51 Eri b from 1 to 5 μm: A Partly Cloudy Exoplanet*, The Astronomical Journal, Volume 154, Issue 1, article id. 10, 20 pp. (2017)., Citations: 93

17. Ruffio, Jean-Baptiste; Macintosh, Bruce; Wang, Jason J.; Pueyo, Laurent; *et al.* (incl **IC**), *Improving and Assessing Planet Sensitivity of the GPI Exoplanet Survey with a Forward Model Matched Filter*, The Astrophysical Journal, Volume 842, Issue 1, article id. 14, 22 pp. (2017)., Citations: 75

16. Gully-Santiago, Michael A.; Herczeg, Gregory J.; **Czekala, Ian**; Somers, Garrett; *et al.*, *Placing the Spotted T Tauri Star LkCa 4 on an HR Diagram*, The Astrophysical Journal, Volume 836, Issue 2, article id. 200, 23 pp. (2017)., Citations: 110

15. MacGregor, Meredith A.; Wilner, David J.; **Czekala, Ian**; Andrews, Sean M.; *et al.*, *ALMA Measurements of Circumstellar Material in the GQ Lup System*, The Astrophysical Journal, Volume 835, Issue 1, article id. 17, 9 pp. (2017)., Citations: 41

14. Cleeves, L. Ilsedore; Öberg, Karin I.; Wilner, David J.; Huang, Jane; *et al.* (incl **IC**), *The Coupled Physical Structure of Gas and Dust in the IM Lup Protoplanetary Disk*, The Astrophysical Journal, Volume 832, Issue 2, article id. 110, 18 pp. (2016)., Citations: 141

13. Villar, V. A.; Berger, E.; Chornock, R.; Margutti, R.; *et al.* (incl **IC**), *The Intermediate Luminosity Optical Transient SN 2010da: The Progenitor, Eruption, and Aftermath of a Peculiar Supergiant High-mass X-Ray Binary*, The Astrophysical Journal, Volume 830, Issue 1, article id. 11, 23 pp. (2016)., Citations: 35

12. Fransson, Claes; Ergon, Mattias; Challis, Peter J.; Chevalier, Roger A.; *et al.* (incl **IC**), *High-density Circumstellar Interaction in the Luminous Type IIn SN 2010jl: The First 1100 Days*, The Astrophysical Journal, Volume 797, Issue 2, article id. 118, 40 pp. (2014)., Citations: 188

11. Scolnic, D.; Rest, A.; Riess, A.; Huber, M. E.; *et al.* (incl **IC**), *Systematic Uncertainties Associated with the Cosmological Analysis of the First Pan-STARRS1 Type Ia Supernova Sample*, The Astrophysical Journal, Volume 795, Issue 1, article id. 45, 23 pp. (2014)., Citations: 167

10. Rest, A.; Scolnic, D.; Foley, R. J.; Huber, M. E.; *et al.* (incl **IC**), *Cosmological Constraints from Measurements of Type Ia Supernovae Discovered during the First 1.5 yr of the Pan-STARRS1 Survey*, The Astrophysical Journal, Volume 795, Issue 1, article id. 44, 34 pp. (2014)., Citations: 315

9. McCrum, M.; Smartt, S. J.; Kotak, R.; Rest, A.; *et al.* (incl **IC**), *The superluminous supernova PS1-11ap: bridging the gap between low and high redshift*, Monthly Notices of the Royal Astronomical Society, Volume 437, Issue 1, p.656-674, Citations: 68

8. Chornock, R.; Berger, E.; Gezari, S.; Zauderer, B. A.; *et al.* (incl **IC**), *The Ultraviolet-bright, Slowly Declining Transient PS1-11af as a Partial Tidal Disruption Event*, The Astrophysical Journal, Volume 780, Issue 1, article id. 44, 20 pp. (2014)., Citations: 190

7. Lunnan, R.; Chornock, R.; Berger, E.; Milisavljevic, D.; *et al.* (incl **IC**), *PS1-10bzj: A Fast, Hydrogen-poor Superluminous Supernova in a Metal-poor Host Galaxy*, The Astrophysical Journal, Volume 771, Issue 2, article id. 97, 13 pp. (2013)., Citations: 85

6. Fong, W.; Berger, E.; Chornock, R.; Margutti, R.; *et al.* (incl **IC**), *Demographics of the Galaxies Hosting Short-duration Gamma-Ray Bursts*, The Astrophysical Journal, Volume 769, Issue 1, article id. 56, 18 pp. (2013)., Citations: 164

5. Chornock, R.; Berger, E.; Rest, A.; Milisavljevic, D.; *et al.* (incl **IC**), *PS1-10afx at $z = 1.388$: Pan-STARRS1 Discovery of a New Type of Superluminous Supernova*, The Astrophysical Journal, Volume 767, Issue 2, article id. 162, 16 pp. (2013)., Citations: 60

4. Sanders, N. E.; Soderberg, A. M.; Levesque, E. M.; Foley, R. J.; *et al.* (incl **IC**), *A Spectroscopic Study of Type Ibc Supernova Host Galaxies from Untargeted Surveys*, The Astrophysical Journal, Volume 758, Issue 2, article id. 132, 24 pp. (2012)., Citations: 106

3. Fong, W.; Berger, E.; Margutti, R.; Zauderer, B. A.; *et al.* (incl **IC**), *A Jet Break in the X-Ray Light Curve of Short GRB 111020A: Implications for Energetics and Rates*, The Astrophysical Journal, Volume 756, Issue 2, article id. 189, 12 pp. (2012)., Citations: 113

2. Berger, E.; Chornock, R.; Lunnan, R.; Foley, R.; *et al.* (incl **IC**), *Ultraluminous Supernovae as a New Probe of the Interstellar Medium in Distant Galaxies*, The Astrophysical Journal Letters, Volume 755, Issue 2, article id. L29, 6 pp. (2012)., Citations: 57

1. Chomiuk, L.; Chornock, R.; Soderberg, A. M.; Berger, E.; *et al.* (incl **IC**), *Pan-STARRS1 Discovery of Two Ultraluminous Supernovae at $z \approx 0.9$*, The Astrophysical Journal, Volume 743, Issue 2, article id. 114, 19 pp. (2011)., Citations: 173

Preprints and Unrefereed Articles

2. Moravec, Emily; **Czekala, Ian**; Follette, Kate; Alpasian, Mehmet; *et al.*, *The Early Career Perspective on the Coming Decade, Astrophysics Career Paths, and the Decadal Survey Process*, Astro2020: Decadal Survey on Astronomy and Astrophysics, APC white papers, no. 8; Bulletin of the American Astronomical Society, Vol. 51, Issue 7, id. 8 (2019), Citations: 1

1. Siemiginowska, Aneta; Eadie, Gwendolyn; **Czekala, Ian**; Feigelson, Eric; *et al.*, *The Next Decade of Astroinformatics and Astrostatistics*, Astro2020: Decadal Survey on Astronomy and Astrophysics, science white papers, no. 355; Bulletin of the American Astronomical Society, Vol. 51, Issue 3, id. 355 (2019), Citations: 6

Students and Postdoctoral Fellows Directly Supervised

- Ms. Mila Rollet De Fougerolles, University of St Andrews MPhys project
  High Dimensional Parametric Models for Protoplanetary Disk Surface Brightness Modelling; 2023-24
- Ms. Carol Ballinger, University of St Andrews MPhys project
  Hierarchical Bayesian Modelling of Protoplanetary Disk Fractions Across Star Forming Regions; 2023-24
- Ms. Marylyn Rosenqvist, University of St Andrews MPhys project
  Mapping Kinematic Perturbations in Protoplanetary Disks Using Molecular Tracer HCN; 2023-24
- Ms. Kristin Hopley, University of St Andrews MPhys project
  Mapping the Inner Edge and Interior Cavity of a Kepler-Analog Circumbinary Protoplanetary Disk; 2023-24

- Mr. Robert Frazier, Pennsylvania State University Undergraduate Student
  Regularized Maximum Likelihood Imaging for ALMA with `MPoL`; Summer 2021
- Mr. Tyler Quinn, Pennsylvania State University Undergraduate Student
  Regularized Maximum Likelihood Imaging for ALMA with `MPoL`; May 2021 - Dec 2021
- Ms. Hannah Grzybowski, Pennsylvania State University Undergraduate Student
  Regularized Maximum Likelihood Imaging for ALMA with `MPoL`; May 2021 - Oct 2021
- Mr. Kadri Bin Mohamad Nizam, Pennsylvania State University Graduate Student
  Variational Autoencoders for Image Reconstruction of Protoplanetary Disks; 2021 - present
- Dr. Brianna Zawadzki, Pennsylvania State University Ph.D. Thesis Advisor
  Regularized Maximum Likelihood Imaging for ALMA; 2020 - 2023
- Ms. Zoe Ko, UC Berkeley Undergraduate Student
  Sub-Millimeter Selected Spectroscopic Binary Survey; 2019 - 2022
- Mr. Joseph Michael Akana Murphy, Stanford University Coterminal Masters Student
  Summer Research and Senior Thesis; 2017 - 2019
  Unveiling the Spectra of Young Stars with Gaussian Processes: Applications to LkCa 15
- Dr. Jeff Jennings, Penn State University Eberly Postdoctoral Fellow
  Faculty Advisor, Aug 2022 - present

Invited Research Talks, Presentations, and Panels

Jun 6-7, 2023	Benisty Group Meeting, Observatoire Côte d'Azur, Nice, France *Sensing the Signatures of Planet Formation*
May 30-31, 2023	CRAL / AstroENS Seminar, Lyon, France *Opportunities for Imaging the Planet Forming Environment with ALMA*
April 27 - 28, 2023,	Mawet Group Presentation, Caltech, Pasadena, CA *Opportunities for Imaging the Planet Forming Environment with ALMA*
August 1, 2022	Oxoplanets Journal Club, Oxford University, Oxford, UK *Opportunities for Imaging the Planet Forming Environment with ALMA*
Dec 13, 2021	General Seminar, Carnegie Earth and Planets Laboratory, Washington D.C. *Opportunities for Imaging the Planet Forming Environment with ALMA*
Nov 3, 2021	ML Club debate (virtual), MLclub.net *Machine Learning and Exoplanets*
Sep 22, 2021	Data Science Community Talk, Pennsylvania State University *Making Images with Radio Interferometers*
Sep 1, 2021	Astrophysics Colloquium, Pennsylvania State University *Opportunities for Imaging the Planet Forming Environment with ALMA*
Jun 9, 2021	AAS 238 Meeting in a Meeting: Current Challenges & the Future of ML in Astronomy Panel *Learning responsibly I: Making inference in a world of imperfect models*
May 25, 2021	Emerging Researchers in Exoplanet Science *Invited panelist for career discussion*
May 21, 2021	Seminar, Joint ALMA Observatory Study Group *Regularized Maximum Likelihood Imaging for ALMA*
April 28, 2021	Astrophysics Colloquium, University of California, Santa Cruz *Opportunities for Imaging the Planet Forming Environment with ALMA*
Dec 11, 2020	Five Years after HL Tau *Panelist for General Discussion on disk dynamics and disk multiplicity*
Jun 11, 2020	Colloquium, Cambridge University, Cambridge, UK

	Disks and Dynamics of Protoplanetary Systems
Feb 3, 2020	Colloquium, New Mexico State University, Las Cruces, NM *Disks and Dynamics of Protoplanetary Systems*
Jan 30, 2020	NRAO Colloquium, Charlottesville, VA *Disks and Dynamics of Protoplanetary Systems*
Jan 27, 2020	Colloquium, Penn State University, State College, PA *Disks and Dynamics of Protoplanetary Systems*
Dec 9, 2019	Colloquium, San Francisco State University, San Francisco, CA *Disks and Dynamics of Protoplanetary Systems*
Oct 22, 2019	Frank Bash Symposium, UT Austin, TX *Disks and Dynamics of Protoplanetary Systems*
Mar 14, 2019	Department lunch talk, UC Berkeley, CA *Circumbinary Planets and Disks*
Feb 6, 2019	SOFIA colloquium, NASA Ames, Mountain View, CA *The Degree of Alignment of Circumbinary Disks and their Host Binaries*
Nov 29, 2018	Weekly seminar, Columbia University, NYC, NY *The Alignment of Binary Star Orbits and their Circumbinary Disks*
Nov 28, 2018	Stars Meeting, Flatiron Institute, NYC, NY *The Alignment of Binary Star Orbits and their Circumbinary Disks*
Nov 8, 2018	Sagan Fellows Symposium at Caltech, Pasadena, CA *The Alignment of Binary Star Orbits and their Circumbinary Disks*
Nov 7, 2018	CIPS Planet and Star Formation Seminar, UC Berkeley, CA *The Alignment of Binary Star Orbits and their Circumbinary Disks*
Apr 24, 2018	KIPAC Tea Talk at Stanford University, Palo Alto, CA *Using Gaussian Processes to Construct Flexible Models of Stellar Spectra*
Jan 10, 2018	AAS Special Session on Gaussian Processes and Machine Learning, Washington, D.C. *Using Gaussian Processes to Construct Flexible Models of Stellar Spectra*
Oct 18, 2017	CIPS Planet and Star Formation Seminar, UC Berkeley, CA *Protoplanetary Disks around Pre-Main Sequence Binary Stars*
June 1, 2017	NAOJ Star and Planet Formation Seminar, NAOJ, Tokyo, Japan *Protoplanetary Disks around Pre-Main Sequence Binary Stars*
May 31, 2017	RIKEN Star and Planet Formation Seminar, RIKEN, Tokyo, Japan *Protoplanetary Disks around Pre-Main Sequence Binary Stars*
May 25, 2017	Kavli Institute for Astronomy and Astrophysics Colloquium, Peking University, Beijing, China *Protoplanetary Disks around Pre-Main Sequence Binary Stars*
May 16, 2017	Harvard Astrostatistics Seminar, Harvard University, Cambridge, MA *Disentangling Spectra With Gaussian Processes: Applications to Radial Velocity Analysis*
Aug 23, 2016	SAMSI Astrostatistics Opening Workshop, Research Triangle Park, NC *Systematics-Dominated Spectroscopic Inference*
Jul 20, 2016	ASIAA Colloquium, Taipei, Taiwan *The Fundamental Properties of Young Stars*
Jul 5, 2016	ASIAA Star Formation Meeting, Taipei, Taiwan *Disk-Based Dynamical Masses and Applications with the SMA*
Jun 9, 2016	Kavli Institute for Astronomy and Astrophysics Lunch Seminar, Peking University, Beijing, China *The Fundamental Properties of Young Stars*
Mar 8, 2016	CfA Exoplanet Lunch, Harvard-Smithsonian Center for Astrophysics *Using Protoplanetary Disks to Precisely Weigh Stars*
Feb 9, 2016	BU Lunch Talk, Boston University, Boston, MA *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
Dec 10-11, 2015	ISM Seminar at UT Austin, Austin, TX

	Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution
Dec 7-8, 2015	Tea Talk at Caltech, Pasadena, CA *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
Nov 17, 2015	KIPAC Tea Talk at Stanford University, Palo Alto, CA *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
Nov 16, 2015	ACES talk at NASA Ames, Mountain View, CA *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
Nov 12-13, 2015	FLASH talk at UC Santa Cruz, Santa Cruz, CA *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
Nov 4, 2015	CIPS Planet and Star Formation Seminar, UC Berkeley, CA *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
Apr 22, 2015	CIPS Planet and Star Formation Seminar, UC Berkeley, CA *Flexible Spectroscopic Inference for Young Stars*
Apr 14, 2015	Astrostatistics Seminar, Statistics Department, Harvard University, MA *Flexible Spectroscopic Inference*

Contributed Research Talks and Presentations

Oct 2, 2023	Centre for Exoplanet Science Seminar, University of St Andrews *Introduction to Radio Observations of Protoplanetary Disks*
Dec 5-9, 2022	Start of Science Workshop, exoALMA, MIT, MA USA *Correlations and Covariance in exoALMA data*
March 29, 2022	KITP Program on "Building Bridges: Towards a Unified Picture of Stellar and Black Hole Binary Accretion and Evolution." *Collecting observational evidence to understand how protoplanetary circumbinary disks form and evolve*
March 16, 2022	KITP conference on "Building Bridges: Towards a Unified Picture of Stellar and Black Hole Binary Accretion and Evolution." Discussion section leader: *Observational Tests of Theory*
Jan 21, 2021	PSETI Seminar, Pennsylvania State University, PA *Introduction to Radio Interferometry with ALMA*
Jul 10, 2020	Bay Area Exoplanet Science Meeting #33, NASA Ames, Mountain View, CA *Protoplanetary Disks in Binaries and Regularized and Maximum Likelihood Imaging for ALMA*
Feb 4-6, 2020	High-resolution Infrared Spectroscopy for Exoplanet Characterization, Caltech *Gaussian Process Spectral Models*
Aug 19-23, 2019	Extreme Solar Systems IV, Reykjavik, Iceland *The Mutual Inclinations of the Proto-Tatooine Disks*
Jul 21-26, 2019	Great Barriers in Planet Formation conference, Palm Cove, Australia *The Degree of Alignment between Circumbinary Disks and their Host Binaries*
Jun 28, 2019	Bay Area Exoplanet Meeting, NASA Ames, Mountain View, CA *Gradient-based Inference Algorithms for Exoplanet Science*
Dec 14, 2018	Bay Area Exoplanet Meeting, NASA Ames, Mountain View, CA *The Degree of Alignment between Circumbinary Disks and their Host Binaries*
Nov 19-23, 2018	Lorentz Center, Leiden, Netherlands *Weighing Stars from Birth to Death* Workshop Presentation

Jan 9, 2018	AAS meeting, Washington, D.C. *Mutual Inclinations of Circumbinary Protoplanetary Disks*
Dec 13, 2017	Exoplanets and Planet Formation, Shanghai, China *Mutual Inclinations of Circumbinary Protoplanetary Disks*
Dec 1, 2017	Bay Area Exoplanet Meeting, NASA Ames, Mountain View, CA *Mutual Inclinations of Circumbinary Protoplanetary Disks*
Aug 22, 2017	Exoclipse Conference, Boise State University, Boise, ID *Disentangling Stellar Spectra with Gaussian Processes: Applications to Radial Velocity Analysis*
Mar 3, 2017	Bay Area Exoplanet Meeting, NASA Ames, Mountain View, CA *Disentangling Stellar Spectra with Gaussian Processes: Applications to Radial Velocity Analysis*
Oct 17-28, 2016	SAMSI Exoplanet Workshop, Research Triangle Park, NC *Modeling Stellar Spectra with Gaussian Processes*
Jan 7, 2016	Dissertation talk, AAS Winter Meeting, Kissimmee, FL *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
Oct 19-21, 2015	Fitting Stars, CMDs, and Galaxies, Rockport, MA *Constructing a Likelihood Function for Spectroscopic Inference*
Sep 18, 2015	Bay Area Exoplanet Science Meeting, The SETI Institute, Mountain View, CA *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
May 28-29, 2015	Emerging Researchers in Exoplanet Science Symposium, The Pennsylvania State University *Accessing the Fundamental Properties of Young Stars*
Jun 18-21, 2014	ExoStat 2014, Carnegie Mellon University, PA *Fitting Stellar Spectra With Some Help From Gaussian Processes*
Apr 27, 2012	CfA OIR Symposium, Cambridge, MA *The Unusually Luminous Extragalactic Nova SN 2010U*
Jan 21 - 27, 2012	Physics of Astronomical Transients, Aspen Center for Physics, Aspen, CO *Supernovae Impostors and Pan-STARRS*
Jun 28 - 30, 2011	Intermediate Luminosity Red Transients, Space Telescope Science Institute, Baltimore, MD *The Unusually Luminous Extragalactic Nova SN 2010U*
Apr 16, 2010	ACC Meeting of the Minds Conference, Georgia Institute of Technology *Precision Array to Probe the Epoch of Reionization (PAPER) Instrumentation Study*
Apr 9 - 10, 2010	AIAA Region I-MA Student Conference, Virginia Institute of Technology *Precision Array to Probe the Epoch of Reionization (PAPER) Instrumentation Study*

P.I. Grants and Proposals

Apr 2021	Institute for Computational and Data Sciences seed grant, $11,500 *Variational Autoencoders for Image Reconstruction of Protoplanetary Disks*
Mar 2021	ALMA Student Observing support for ALMA program 2019.1.01210.S., $35,000 *Mapping the Inner Edge and Interior Cavity of a Kepler-Analog Circumbinary Protoplanetary Disk*
Nov 2020	IRAM 30m project No. 140-20, 2020 - 2021 winter semester, A ranking 13.7 hrs
Oct 2020	ALMA Cycle 8 Development Study *Regularized Maximum Likelihood Techniques for ALMA Spectral Line Imaging* Oct 2020 - 2021, $167,746
Aug 2019	ALMA Cycle 7: *Mapping the Inner Edge and Interior Cavity of a Kepler-Analog Circumbinary Protoplanetary Disk*, 4.8 hrs Band 6
Aug 2019	Automated Planet Finder/Lick : *Identifying Circumbinary Disk Systems with the APF* 3 nights
Aug 2019	Automated Planet Finder/Lick : *Dynamical Masses to Set the Ages of Nearby Young Moving Groups* 3 nights
Feb 2019	Automated Planet Finder/Lick : *Identifying Circumbinary Disk Systems with the APF* 4 nights
Feb 2019	Automated Planet Finder/Lick : *Dynamical Masses to Set the Ages of Nearby Young Moving Groups* 3 nights
Aug 2018	ALMA Cycle 6: *Unlocking the TWA 3 Triple System with ALMA* 1.3 hrs Band 6
Aug 2018	ALMA Cycle 6: *Mapping the Inner Edge of a Kepler-Analog Circumbinary Protoplanetary Disk* 5.7 hrs Band 6
Aug 2016	ALMA Cycle 4: *Resolving the AK Sco Circumbinary Disk* 1 hour Band 6
Oct 2014	CfA Optical and Infrared division: *Pre-Main Sequence Models* 1 night on Magellan/MIKE
Jun 2014	CfA Optical and Infrared division: *Determining the Systematic Error of Veiling* 3 nights each on 1.5m/TRES and 1.2m/Keplercam
Oct 2013	CfA Optical and Infrared division: *Pre-Main Sequence Models* 1 night on Magellan/MIKE
Jun 2013	CfA Optical and Infrared division: *Pre-Main Sequence Models* 3 nights each on 1.5m/TRES and 1.2m/Keplercam

Workshops and Conferences

Dec 5 - 9, 2022	exoALMA ALMA LP meeting, Boston, MA, USA
May 23 - 27, 2022	exoALMA ALMA LP meeting, Milan, Italy
Jan 21 - 24, 2020	MAPS ALMA LP meeting, CfA | Harvard and Smithsonian, Cambridge, MA
Oct 21 - 25, 2019	*Visualizing the Kinematics of Planet Formation*, Flatiron Institute, NYC
Jun 23 - 28, 2013	*Gordon Research Conference on Origins of Solar Systems*, Mount Holyoke, MA
May 29 - Jun 5, 2012	*NRAO Summer School on Interferometry and Aperture Synthesis*, Socorro, NM
Sept 14 - 16, 2011	*NRAO CASA Reduction Workshop*, Socorro, NM
Sept 18 - 21, 2011	*PAN-STARRS Science Consortium Meeting*, Cambridge, MA
Aug 24 - 25, 2011	*Derek Bok Teaching Conference*, Harvard University, Cambridge, MA
Sept 22, 2009	*The Fourth North American ALMA Science Center Conference*, Charlottesville, VA

Open Source Code Packages

MPoL	Regularized Maximum Likelihood Imaging for ALMA https://mpol-dev.github.io/MPoL/
visread	Visibility Reading Tools for Radio Astronomy https://mpol-dev.github.io/visread/
PSOAP	Disentangling of Stellar Spectra for Radial Velocity Analysis https://github.com/iancze/PSOAP ASCL: http://adsabs.harvard.edu/abs/2017ascl.soft05013C
DiskJockey	UV plane modeling of sub-mm interferometric protoplanetary disk observations https://github.com/iancze/DiskJockey ASCL: http://adsabs.harvard.edu/abs/2016ascl.soft03011C
Starfish	Modular tools for spectroscopic inference http://iancze.github.io/Starfish/ ASCL: http://adsabs.harvard.edu/abs/2015ascl.soft05007C

Observing Experience

Magellan Clay 6.5 Meter, Las Campanas Observatory, Chile

Jul 3-4, 2015	*MIKE* Pre-Main Sequence Models
May 22-23, 2014	*MIKE* Pre-Main Sequence Models
Oct 20-21, 2011	*LDSS-3* and *MagE* GRB host galaxies and supernovae candidates from Pan-STARRS
Jan 11-12, 2011	*LDSS-3* GRB host galaxies and supernovae candidates from Pan-STARRS

Multiple Mirror Telescope 6.5 Meter, Fred Lawrence Whipple Observatory, Arizona

Nov 26-28, 2011	*BlueChannel* Pan-STARRS supernova and variable stars
Feb 21-23, 2011	*BlueChannel* Pan-STARRS supernova and variable stars

Commissioning

Jun - Aug, 2012	*MMTCam* commissioning and installation at MMT

The Submillimeter Array Interferometer, Mauna Kea, Hawaii

Feb 20-24, 2014	SMA queue observing
Nov 6 - 10, 2014	SMA queue observing
Jan 14 - 20, 2015	SMA queue observing

Gemini Planet Imager (GPI), Gemini South, Chile

Nov 16-18, 2016	GPI Exoplanet Survey

IRAM 30m (mm-wave), Pico Veleta, Spain

Apr 28 - May 1, 2021	IRAM 30m (project No. 140-20), 13.7 hrs

Teaching

Fall 2024	*(Upcoming) Lecturer*, AS5001: Advanced Data Analysis (MPhys) University of St Andrews
Spring 2024	*Lecturer*, AS4012/AS5522: Stars and Nebulae II, Stellar Structure and Evolution University of St Andrews
Fall 2023	*Lecturer*, AS5003: Contemporary Astrophysics (MPhys): Radio Interferometry and Imaging University of St Andrews
Jan - Apr 2023	*Professor*, Astro 6 (undergraduate general education): Stars, Galaxies, and the Universe Pennsylvania State University
Aug - Dec 2022	*Professor*, Astro 589 (graduate astrophysics) *Radio Astronomy and Interferometric Imaging* (website) Pennsylvania State University
Aug - Dec 2021	*Professor*, Astro 542 (graduate astrophysics) *The Interstellar Medium and Star Formation* (website) Pennsylvania State University
Aug - Dec 2020	*Professor*, Astro 6 (undergraduate general education): Stars, Galaxies, and the Universe Pennsylvania State University
Jan - May 2013	*Teaching Fellow*, AY 193: Noise and Data Analysis in Astrophysics Bok Center Certificate of Distinction in Teaching Wrote and delivered two class lectures
Jan - May 2013	AY302: *Scientists Teaching Science*, taught by Dr. Phil Sadler
Sep - Dec 2012	*Teaching Fellow*, AY 17: Galaxies and Cosmology Bok Center Certificate of Distinction in Teaching

Professional Service

May 2024	Convener, Ph.D. Examination Committee Matt Moore, University of St. Andrews
May 2024	HST Cycle 32 External Panelist, ExoPlanets
Apr 2024	Subject-matter expert reviewer in a NASA peer review
Spring 2024	Scientific Organizing Committee, Conference Spatio-spectral Modeling of Interferometric Data: Preparing for the Wideband Era National Radio Astronomy Observatory, Charlottesville, VA
Jan 2024	External Reviewer for NSF AI Institute Proposal from an R1 research university
2023-2024	Astronomy Postgraduate Admissions Committee, University of St Andrews
Jan 2024 - present	Astronomy Honours Curriculum Review Committee, University of St Andrews
Nov 2023 - present	Reviewer for Astronomy & Astrophysics Journal
Spring 2023	HST Cycle 31 External Panelist, ExoPlanets
May 2023	PSU Comprehensive Exam Committee Member, Kaylee De Soto
May 2023	PSU Ph.D. Thesis Committee Member, Arvind Gupta
Dec 2022 - Jan 2023	CEHW postdoctoral fellowship committee
Dec 2022	PSU Astronomy Graduate Admissions Preliminary Reviewer
Fall 2022	PSU 51 Peg b Postdoctoral fellowship committee
Fall 2022 - Spring 2023	Center for Astrostatistics Lunch Seminar Co-Organizer
Fall 2022 - Feb 2023	Comprehensive Exam Committee Member, Andrew Pellegrino
Fall 2022 - Spring 2023	Penn State Astrophysics Colloquium Committee
Fall 2022 - Spring 2023	Penn State ECoS Sustainability Council Astrophysics Representative
Fall 2022 - Spring 2023	Penn State Astrophysics Climate and Diversity Committee
Fall 2022 - Spring 2023	Penn State Astrophysics Hobby Eberly Telescope TAC
Fall 2022 - present	Graduate Student Mentor (PSU graduate student)
Oct 2022	Comprehensive Exam Committee Member, Nicholas Tusay
May 2022	ALMA Large Program External Reviewer
Sep 2021 - May 2022	Academic Advisor (PSU graduate student)
Sep 2021 - May 2022	Astronomy and Astrophysics faculty search committee
Sep 2021 - May 2022	PSU Astronomy Graduate Admissions Committee
Dec 2021 - Jan 2022	CEHW Postdoctoral Fellowship Committee Member
Apr 2021	Pennsylvania State University Eberly College of Science, faculty search committee
Feb 2021	JWST Cycle 1 Time Allocation panelist, *exoplanets and disks*
Jan 2021	Eberly Postdoctoral Fellowship interview panelist
May 2021 - May 2023	Ph.D. Thesis Committee Chair, Brianna Zawadzki
Jan 2021 - May 2023	PSU Ph.D. Thesis Committee Member, Macy Huston
Dec 2020 - Feb 2021	Ph.D. Thesis Committee Member, Alan Reyes
Dec 2020	Comprehensive Exam Committee Member, Macy Huston (PSU)
Oct 2020 - Jun 2022	Ph.D. Thesis Committee Member, Elizabeth Melton
Sep 2020 - 2023	PSU Astronomy Graduate Admissions Committee
Aug 2020 - 2022	PSU Astronomy Development and Alumni Relations Committee
Mar 2020	TESS Cycle 3 GO Time Allocation Committee Panelist
Jan 2020 - present	Referee for MNRAS
Sep 2019 - Mar 2020	Berkeley ExoCoffeeTea arXiv discussion organizer
29 Apr - 2 May, 2019	AURA Future Leader
Apr 2019	Subject-matter expert reviewer in a NASA peer review
Fall 2018	NAS Astro2020 Early Career Decadal Survey Focus Session Participant
2017 - 2018	Stanford KIPAC Colloquium Committee
Dec 2016	Bay Area Exoplanet Meeting LOC
2016 - present	Referee for the Astrophysical Journal
2013 - 2015	Harvard Astronomy Department Peer mentor
2012 - 2013	Harvard Undergrad Observing Project (HOP) volunteer
Feb 2011 - Feb 2012	Fauquier County Light Pollution High School Science Project Mentor with student Ms. Virginia Johnson
Jul 2011 - 2015	Library Committee Graduate Student Representative, Harvard-Smithsonian CfA Wolbach Library

Outreach

Oct 25, 2022	Astronomy on Tap, State College, PA USA *Conjuring Ghastly Images of Proto-planets*
Aug 2016	Montauk Observatory Public Lecture, Montauk, NY *East End Dark Skies Spark a Career in Astrophysics*
Apr 28, 2012	Cambridge Explores the Universe, volunteer
Sep 2011 - Mar 2012	Braintree High School Science Fair Mentor with students Mr. Joshua Kelleher and Mr. Brendan Newell
Feb 8, 2012	High Science Fair Judge, East Boston High School
Oct 26, 2011	Science in the News (SITN) Public Lecture, *The Chemical Enrichment of the Universe*, Boston, MA
Dec 2010 - 2015	*Astrobites* (daily astrophysical literature journal) co-founder and contributing author
Oct 2009 - Apr 2010	*Dark Skies, Bright Kids* science program, Central Virginia

Selected Posters

6. *The Degree of Alignment Between Circumbinary Disks and their Host Binaries*
   Ian Czekala, E. Chiang, S. M. Andrews, E. L. N. Jensen, G. Torres, D. J. Wilner, K. G. Stassun, & B. Macintosh
   New Horizons in Planetary Systems, Victoria, BC, Canada. May 13-17, 2019

5. *Using Protoplanetary Disks to Weigh the Youngest Stars and Constrain The Earliest Stages of Stellar Evolution*
   Ian Czekala, S. M. Andrews, E. L. N. Jensen, K. G. Stassun, D. Latham, D. J. Wilner, & G. Torres
   Extreme Solar Systems III Conference, Waikoloa Village, HI, Nov 29 - 4, 2015

4. *A Disk-based Dynamical Mass Estimate for the Young Binary AK Sco*
   Ian Czekala, S. M. Andrews, E. L. N. Jensen, K. G. Stassun, G. Torres, & D. J. Wilner
   2015 Gordon Research Conference on Origins of Solar Systems, Mount Holyoke, MA

3. *A Novel Tool for the Spectroscopic Inference of Fundamental Stellar Parameters*
   Czekala, Ian; Andrews, Sean M.; Latham, David W.; Torres, Guillermo
   Summer AAS Meeting #224 #322.01, Boston, MA

2. *The Unusually Luminous Extragalactic Nova SN 2010U*
   Czekala, Ian; Chornock, R.; Berger, E.; Pastorello, A.; Marion, G. H.; Challis, P.; Wheeler, J. C.; Botticella, M. T.; Smartt, S.; Ergon, M.; Sollerman, J.
   American Astronomical Society, AAS Meeting #218, #127.11; Vol. 43, 2011

1. *Truncated Disks in TW Hya Association Multiple Star Systems*
   Czekala, Ian; Andrews, Sean
   American Astronomical Society, AAS Meeting #215, #428.05; Vol. 42, p.345 awarded **Chambliss Student Achievement Award**

Collaborative Posters

2. *Snapshots of the Universe: A Multi-Lingual Astronomy Art Book*
   Beaton, Rachael; Jackson, L.; Carlberg, J.; Johnson, K.; Marchand, R.; Sivakoff, G.; **Czekala, I.**; Damke, G.; Dean, J.; Drosback, M.; Gugliucci, N.; Martinez, O.; Wong, A.; Zasowski, G.; Skies, Dark; Kids, Bright
   American Astronomical Society, AAS Meeting #220, #437.13

1. *Astrobites: The Astro-ph Reader's Digest For Undergraduates*
   Sanders, Nathan; Newton, E. R.; **Czekala, I.**; Rosenfeld, K.; Dressing, C. D.; Gifford, D.; Suresh, J.; Schneider, E.; Morley, C.; Kohler, S.
   American Astronomical Society, AAS Meeting #218, #333.11; Bulletin of the American Astronomical Society, Vol. 43, 2011

References

Professor Eugene Chiang	University of California at Berkeley (echiang@astro.berkeley.edu)
Dr. Sean M. Andrews	Center for Astrophysics | Harvard and Smithsonian (sandrews@cfa.harvard.edu)
Professor Bruce Macintosh	Stanford University (bmacintosh@stanford.edu)
Professor Eric L. N. Jensen	Swarthmore College (ejensen1@swarthmore.edu)
Professor Kaisey Mandel	University of Cambridge IfA (kmandel@ast.cam.ac.uk)
Dr. David Latham	Center for Astrophysics | Harvard and Smithsonian (dlatham@cfa.harvard.edu)
Professor James Moran	Center for Astrophysics | Harvard and Smithsonian (jmoran@cfa.harvard.edu)
Professor Kelsey Johnson	University of Virginia (kej7a@virginia.edu)