School of Physics and Astronomy University of St. Andrews School Website

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of star and planet formation.

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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

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: 66 / citations: 4768 / h-index: 39 / (2024-03-12) [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: 2
- 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: 68
- 10. **Czekala, lan**; 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: 21
- 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: 19
- 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: 77
- 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: 27
- 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
- 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: 55
- 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: 94

- 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: 77
- 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: 59

All Other Refereed Publications

- 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: 8
- 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: 31
- 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: 30
- 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: 57
- 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: 27
- 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: 36
- 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: 59
- 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: 23
- 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: 22
- 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: 21
- 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: 63
- 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: 30
- 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: 35

- 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: 29
- 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 HC₃N, CH₃CN, and c-C₃H₂, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.9, 20 pp., Citations: 38
- 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: 24
- 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: 46
- 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, C₂H, and H₂CO, The Astrophysical Journal Supplement Series, Volume 257, Issue 1, id.6, 18 pp., Citations: 43
- 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: 97
- 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: 66
- 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: 67
- 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: 139
- 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: 124
- 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: 132
- 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: 16
- 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: 28
- 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: 75
- 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: 19
- 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: 41
- 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: 300
- 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: 18
- 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: 60
- 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: 99
- 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: 22
- 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: 92
- 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: 74
- 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: 104
- 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: 39
- 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: 33
- 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: 181
- 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: 166
- 10. Rest, A.; Scolnic, D.; Foley, R. J.; Huber, M. E.; et al. (incl IC), Cosmological Constraints from Measurements of Type la 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: 313
- 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: 187

- 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: 84
- 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: 163
- 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: 59
- 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: 172

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 <i>The Fundamental Properties of Young Stars</i>
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." <i>Collecting observational evidence to understand how protoplanetary circumbinary disks form and evolve</i>
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 : <i>Identifying Circumbinary Disk Systems with the APF</i> 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 : <i>Identifying Circumbinary Disk Systems with the APF</i> 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: <i>Unlocking the TWA 3 Triple System with ALMA</i> 1.3 hrs Band 6
Aug 2018	ALMA Cycle 6: <i>Mapping the Inner Edge of a Kepler-Analog Circumbinary Protoplanetary Disk</i> 5.7 hrs Band 6
Aug 2016	ALMA Cycle 4: Resolving the AK Sco Circumbinary Disk
. 6	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 $1.5 m/TRES$ and $1.2 m/Keplercam$

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)
A D 2001	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
Jan - May 2013 Sep - Dec 2012	Wrote and delivered two class lectures AY302: Scientists Teaching Science, taught by Dr. Phil Sadler Teaching Fellow, AY 17: Galaxies and Cosmology Bok Center Certificate of Distinction in Teaching

Professional Service and Outreach

Spring 2024	Scientific Organizing Committee, Conference
	Spatio-spectral Modeling of Interferometric Data: Preparing for the Wideband Era
	National Radio Astronomy Observatory, Charlottesville, VA
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
	Comprehensive Exam Committee Member, Andrew Pellegrino
	Penn State Astrophysics Colloquium Committee
	Penn State ECoS Sustainability Council Astrophysics Representative
	Penn State Astrophysics Climate and Diversity Committee
	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
Fall 2018	
2017 - 2018	NAS Astro2020 Early Career Decadal Survey Focus Session Participant Stanford KIPAC Colloquium Committee
Dec 2016	•
2016 - present	Bay Area Exoplanet Meeting LOC
2010 - present 2013 - 2015	Referee for the Astrophysical Journal Harvard Astronomy Department Peer mentor
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2012 - 2013 Feb 2011 - Feb 2012	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

lan 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

lan 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 lan 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

Vol. 43, 2011

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

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,

References

Professor Eugene Chiang University of California at Berkeley (echiang@astro.berkeley.edu)

Professor Bruce Macintosh Stanford University (bmacintosh@stanford.edu)

Dr. Sean M. Andrews Center for Astrophysics | Harvard and Smithsonian (sandrews@cfa.harvard.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)