BRETT H. ANDREWS

Curriculum Vitae

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EXPERIENCE	**Research Associate Professor** Department of Physics and Astronomy, University of Pittsburgh	2022–present
	Research Assistant Professor Department of Physics and Astronomy, University of Pittsburgh	2017–2022
	Postdoctoral Associate Department of Physics and Astronomy, University of Pittsburgh	2014–2017
EDUCATION	**Ph.D. Astronomy** The Ohio State University "Decoding Galaxy Evolution with Gas-phase and Stellar Elemental Abundances" Advisors: David H. Weinberg & Jennifer A. Johnson	2014
	M.S. Astronomy The Ohio State University	2011
	B.S. Physics & Astronomy Yale University Nicolas Adamo Scholar-Athlete Prize (Silliman College)	2008
PUBLICATIONS	4 lead author; 11 significant contributing author; 58 contributing author; 3 additional publications. List attached.	
PRESENTATIONS	4 invited; 28 contributed; 2 posters. List attached.	
FUNDING	**PI: NASA Nancy Grace Roman Space Telescope Research and Support Participation Opportunities** Exploiting Deep Learning to Improve Roman Photometric Redshifts **$287,881**	2023–present
	Co-I: NASA Nancy Grace Roman Space Telescope Research and Support Participation Opportunities A Statistical Framework for Optimizing Roman Spectroscopic Training Sets **$291,061**	2023–present
	Co-I: NASA Nancy Grace Roman Space Telescope Research and Support Participation Opportunities Maximizing Cosmological Science with the Roman High Latitude Imaging Survey **$19.5M ($665,310 to Pitt)**	2023–present

	Co-I: NASA Hubble Space Telescope Cycle 30 SNAP Proposal (409 orbits) Post-starbursts from DESI: Timing quenching and morphological transformation at $1 < z < 1.3$ **$202,893**	2022–present
	Senior Personnel: NSF Major Research Instrumentation Program Acquisition of Cutting-Edge GPU and MPI Nodes for the Interdisciplinary Pitt Center for Research Computing **$1,187,606**	2021–2024
	PI: NSF Astronomy and Astrophysics Research Grants Interpretable and Deblended Photometric Redshifts with a Deep Capsule Network **$535,578**	2020–present
	Co-I: NASA Astrophysical Data Analysis Program Multiwavelength Milky Way Analogs **$504,949**	2019–present
	Co-I: NASA Astrophysical Data Analysis Program (Funded Extension) Multiwavelength Milky Way Analogs **$33,707**	2021

MENTORING PH.D.	**Finian Ashmead** (University of Pittsburgh) "A Statistical Framework for Optimizing Roman Spectroscopic Training Sets for Roman Photometric Redshifts"	2023–present
	Yoquelbin Salcedo Hernandez (University of Pittsburgh) "DESI-2 Emission Line Galaxy Target Selection"	2022–present
	Ashod Khederlarian (University of Pittsburgh) "Data-driven Implementation of Emission Lines in Mock Galaxy Surveys for Improving Photometric Redshift Predictions"	2022–present
	Biprateep Dey (University of Pittsburgh) "Estimating Photometric Redshifts with Deep Neural Networks"	2018–present
	Troy Raen (University of Pittsburgh) "Toward the Study of Stars with LSST"	2019–2022
	Catherine Fielder (University of Pittsburgh) "Constraining the Milky Way's Ultraviolet to Infrared SED"	2018–2022
M.S.	**Quanbin (Eric) Ma** (Carnegie Mellon University Machine Learning Department) "Deep Dimensionality Reduction of MaNGA Data"	2017
Undergraduate	**Emma Moran** (University of Pittsburgh) "Improving the Physical Interpretation of Deep Neural Networks for Estimating Photometric Redshifts"	2023–present
	Zach Lewis (University of Pittsburgh) "The Gas-Phase Mass-Metallicity Relation for Massive Galaxies at $z \sim 0.7$ with the LEGA-C Survey"	2019–2022

	Katie Mack (University of Pittsburgh)	2021–2022
	"Comparing Stellar and Emission Line Dust Attenuation in the LEGA-C Survey"	
	Ian Cooper (University of Pittsburgh)	2016
	"SNIa Hosts in MaNGA"	
High School	**Mariah Jones** (Baldwin High School)	2020–2021
	"The Mass–Metallicity Relation at Intermediate Redshifts"	

SERVICE TO PROFESSION

Invited Referee for *ApJ*, *MNRAS*, *A&A*, and *PASP*

Invited Reviewer for NSF

Faculty Hiring Committee
Department of Physics and Astronomy, University of Pittsburgh
− LSST LINCC Research Assistant Professor   2022–2023
                                                                        2021–2022
− Astrophysics or Experimental High Energy Physics with Machine Learning   2018–2019
(Tenure-stream)

Faculty Peer Buddy   2021–2023
University of Pittsburgh

TEACHING

ASTRON 3580: Galactic and Extragalactic Astronomy (University of   Spring 2024
Pittsburgh)
Co-instructor with Jeff Newman.

Member of the Graduate Faculty (University of Pittsburgh)   2024–present

WORKSHOPS

AstroPGH Python Boot Camp and Summer Seminar Series (University of Pittsburgh and Carnegie Mellon University)
• Intense three day workshop introducing the Python programming language for astrophysics graduate and undergraduate students.
− Organizer. Presented lecture on Matplotlib.   2024
− Organizer.   2023
− Organizer. Presented lecture on Python and Jupyter.   2022
− Organizer. Presented two lectures on Numpy and Pandas.   2021
− Organizer. Presented eight lectures on Python basics, Astropy, Pandas, Git,   2020
and GitHub.

Writing Fridays Workshops (University of Pittsburgh)   2023–present
• Led weekly writing workshops for astrophysics graduate students.

Professional Development Workshops (University of Pittsburgh)
• Co-led workshops with Rachel Bezanson for astrophysics graduate students.
− Webpage and CV Workshops   2022
− Webpage Workshop   2021
− CV, Resume, and Webpage Workshops   2020

Data Science Group Meeting (University of Pittsburgh)   2018
• Organized event series for astrophysics graduate students.

	Marvin Workshops (SDSS-IV Collaboration Meetings)	2015–2017
	• Led introductory workshops for users of the `Marvin` software toolkit.	
	Python Boot Camps (University of Pittsburgh)	2015
	• Led events for undergraduate and graduate students.	

OUTREACH

The Ellis School (First Grade STEM Class)
— "How the Sun, Earth, and Moon align for a solar eclipse" — 2024

Shadyside Presbyterian Church Nursery School (Pre-K Class)
— "A Few Beautiful Minutes: Experiencing a Solar Eclipse" — 2024

Allegheny Observatory Public Lecture Series
— "The True Colors of the Milky Way" — 2023

Astronomy on Tap
— "The Origin of the Elements" — 2018
— "Indiana Jones and the Hidden Galaxy" w/ Courtney Epstein — 2014

Learn & Earn Corporate Host — 2021
Hosted intern for summer youth employment program delivered by Allegheny
County, the City of Pittsburgh, and Partner4Work.

Science Olympiad — 2011
Coached Grandview Heights (Ohio) Middle School team.

COLLAB.

LSST Dark Energy Science Collaboration (DESC) Full Member — 2023

SDSS-IV/MaNGA Architect — 2016

SOFTWARE

flexCE
Python package for modeling galactic chemical evolution.

Marvin
Python package, RESTful API, and Flask web application for accessing,
visualizing, and analyzing SDSS-IV MaNGA integral-field spectroscopic data.

Brett H. Andrews

Publications

Lead Author

4. **Andrews, B. H.**, et al., 2017, *The Astrophysical Journal*, 835, 224
   Inflow, Outflow, Yields, and Stellar Population Mixing in Chemical Evolution Models
3. **Andrews, B. H.** & Martini, P., 2013, *The Astrophysical Journal*, 765, 140
   The Mass-Metallicity Relation with the Direct Method on Stacked Spectra of SDSS Galaxies
2. **Andrews, B. H.**, et al., 2012, *Acta Astronomica*, 62, 269
   Principal Component Abundance Analysis of Microlensed Bulge Dwarf and Subgiant Stars
1. **Andrews, B. H.** & Thompson, T. A., 2011, *The Astrophysical Journal*, 727, 97
   Assessing Radiation Pressure as a Feedback Mechanism in Star-forming Galaxies

Sig. Contrib. Author

11. Khederlarian, A., Newman, J. A., **Andrews, B. H.**, et al., 2024, *Monthly Notices of the Royal Astronomical Society*, 531, 1454
    Emission Line Predictions for Mock Galaxy Catalogues: a New Differentiable and Empirical Mapping from DESI
10. Lewis, Z., **Andrews, B. H.**, et al., 2024, *The Astrophysical Journal*, 964, 59
    The Gas-Phase Mass–Metallicity Relation for Massive Galaxies at $z \sim 0.7$ with the LEGA-C Survey
9. Fielder, C., **Andrews, B. H.**, et al., 2023, *Monthly Notices of the Royal Astronomical Society*, 525, 1023
    Empirically Driven Multiwavelength K-corrections At Low Redshift
8. Kodra, D., **Andrews, B. H.**, et al., 2023, *The Astrophysical Journal*, 942, 36
    Optimized Photometric Redshifts for the Cosmic Assembly Near-Infrared Deep Extragalactic Legacy Survey (CANDELS)
7. Dey, B., **Andrews, B. H.**, et al., 2022, *Monthly Notices of the Royal Astronomical Society*, 515, 4
    Photometric Redshifts from SDSS Images with an Interpretable Deep Capsule Network
6. Dey, B., Zhao, D., Newman, J. A., **Andrews, B. H.**, et al., 2022, *arXiv:stat/2205.14568*
   Calibrated Predictive Distributions via Diagnostics for Conditional Coverage
5. Dey, B., Newman, J. A., **Andrews, B. H.**, et al., 2021, *arXiv:astro-ph/2110.15209*
   Re-calibrating Photometric Redshift Probability Distributions Using Feature-space Regression
4. Fielder, C. E., Newman, J. A., **Andrews, B. H.**, et al., 2021, *Monthly Notices of the Royal Astronomical Society*, 508, 4459
   Constraining the Milky Way's ultraviolet-to-infrared SED with Gaussian process regression
3. Cherinka, B., **Andrews, B. H.**, et al., 2019, *The Astronomical Journal*, 158, 74
   Marvin: A Tool Kit for Streamlined Access and Visualization of the SDSS-IV MaNGA Data Set
2. Weinberg, D. H., **Andrews, B. H.**, & Freudenburg, J., 2017, *The Astrophysical Journal*, 837, 183
   Equilibrium and Sudden Events in Chemical Evolution
1. Brown, J. S., Martini, P., & **Andrews, B. H.**, 2016, *Monthly Notices of the Royal Astronomical Society*, 458, 1529
   A recalibration of strong-line oxygen abundance diagnostics via the direct method and implications for the high-redshift universe

Contributing Author

58. Moskowitz, I., et al., 2024, *The Astrophysical Journal Letters*, 967, L6
    Improving Photometric Redshift Estimates with Training Sample Augmentation

57. Yantovski-Barth, M. J., et al., 2024, *Monthly Notices of the Royal Astronomical Society*, 531, 2285
    The CluMPR Galaxy Cluster-Finding Algorithm and DESI Legacy Survey Galaxy Cluster Catalogue

56. Zhou, S., et al., 2023, *Monthly Notices of the Royal Astronomical Society*, 521, 5810
    Are Milky-Way-like galaxies like the Milky Way? A view from SDSS-IV/MaNGA

55. Setton, D., et al., 2023, *The Astrophysical Journal Letters*, 947, 31
    DESI Survey Validation Spectra Reveal an Increasing Fraction of Recently Quenched Galaxies at $z \sim 1$

54. Kartaltepe, J., et al., 2023, *The Astrophysical Journal Letters*, 946, 15
    CEERS Key Paper. III. The Diversity of Galaxy Structure and Morphology at z = 3–9 with JWST

53. Boardman, N., et al., 2022, *Monthly Notices of the Royal Astronomical Society*, 514, 2298
    How well do local relations predict gas-phase metallicity gradients? Results from SDSS-IV MaNGA

52. Oyarzún, G. A., et al., 2022, *The Astrophysical Journal*, 933, 88
    SDSS-IV MaNGA: How the Stellar Populations of Passive Central Galaxies Depend on Stellar and Halo Mass

51. Schaefer, A. L., et al., 2022, *The Astrophysical Journal*, 930, 2
    SDSS-IV MaNGA: Exploring the Local Scaling Relations for N/O

50. Abdurro'uf, et al., 2021, *The Astrophysical Journal Supplement Series*, 259, 2
    The Seventeenth Data Release of the Sloan Digital Sky Surveys: Complete Release of MaNGA, MaStar, and APOGEE-2 Data

49. Law, D., et al., 2020, *The Astrophysical Journal*, 915, 35
    SDSS-IV MaNGA: Refining Strong Line Diagnostic Classifications Using Spatially Resolved Gas Dynamics

48. Parikh, T., et al., 2021, *Monthly Notices of the Royal Astronomical Society*, 502, 5508
    SDSS-IV MaNGA: radial gradients in stellar population properties of early-type and late-type galaxies

47. Greener, M., et al., 2021, *Monthly Notices of the Royal Astronomical Society*, 502, 95
    SDSS-IV MaNGA: the 'G-dwarf problem' revisited

46. Luo, Y., et al., 2021, *The Astrophysical Journal*, 908, 183
    Evidence for the Accretion of Gas in Star-forming Galaxies: High N/O Abundances in Regions of Anomalously Low Metallicity

45. Mazzola, C., et al., 2020, *Monthly Notices of the Royal Astronomical Society*, 499, 1607
    The close binary fraction as a function of stellar parameters in APOGEE: a strong anticorrelation with α abundances

44. Boardman, N., et al., 2020, *Monthly Notices of the Royal Astronomical Society*, 498, 4943
    Are the Milky Way and Andromeda unusual? A comparison with Milky Way and Andromeda analogues

43. Fraser-McKelvie, A., et al., 2020, *Monthly Notices of the Royal Astronomical Society*, 495, 4158
    SDSS-IV MaNGA: spatially resolved star formation in barred galaxies

42. Ahumada, R., et al., 2020, *The Astrophysical Journal Supplement Series*, 249, 3
    The 16th Data Release of the Sloan Digital Sky Surveys: First Release from the APOGEE-2 Southern Survey and Full Release of eBOSS Spectra

41. Greener, M. J., et al., 2020, *Monthly Notices of the Royal Astronomical Society*, 495, 2305
    SDSS-IV MaNGA: spatially resolved dust attenuation in spiral galaxies

40. Schaefer, A. L., et al., 2020, *The Astrophysical Journal*, 890, L3
    SDSS-IV MaNGA: Variations in the N/O-O/H Relation Bias Metallicity Gradient Measurements

39. Boardman, N., et al., 2020, *Monthly Notices of the Royal Astronomical Society*, 491, 3672
    Milky Way analogues in MaNGA: multiparameter homogeneity and comparison to the Milky Way

38. Westfall, K. B., et al., 2019, *The Astronomical Journal*, 158, 231
    The Data Analysis Pipeline for the SDSS-IV MaNGA IFU Galaxy Survey: Overview

37. Fraser-McKelvie, A., et al., 2019, *Monthly Notices of the Royal Astronomical Society*, 488, L6
    SDSS-IV MaNGA: stellar population gradients within barred galaxies
36. Pace, Z. J., et al., 2019, *The Astrophysical Journal*, 883, 83
    Resolved and Integrated Stellar Masses in the SDSS-IV/MaNGA Survey. II. Applications of PCA-based Stellar Mass Estimates
35. Pace, Z. J., et al., 2019, *The Astrophysical Journal*, 883, 82
    Resolved and Integrated Stellar Masses in the SDSS-IV/MaNGA Survey. I. PCA Spectral Fitting and Stellar Mass-to-light Ratio Estimates
34. Zhang, K., et al., 2019, *The Astrophysical Journal*, 883, 63
    Machine-learning Classifiers for Intermediate Redshift Emission-line Galaxies
33. Oyarzún, G. A., et al., 2019, *The Astrophysical Journal*, 880, 111
    Signatures of Stellar Accretion in MaNGA Early-type Galaxies
32. Parikh, T., et al., 2019, *Monthly Notices of the Royal Astronomical Society*, 483, 3420
    SDSS-IV MaNGA: local and global chemical abundance patterns in early-type galaxies
31. Aguado, D. S., et al., 2019, *The Astrophysical Journal Supplement Series*, 240, 23
    The Fifteenth Data Release of the Sloan Digital Sky Surveys: First Release of MaNGA-derived Quantities, Data Visualization Tools, and Stellar Library
30. Hwang, H.-C., et al., 2019, *The Astrophysical Journal*, 872, 144
    Anomalously Low-metallicity Regions in MaNGA Star-forming Galaxies: Accretion Caught in Action?
29. Li, H., et al., 2019, *The Astrophysical Journal*, 872, 63
    Interpreting the Star Formation-Extinction Relation with MaNGA
28. Zasowski, G., et al., 2019, *The Astrophysical Journal*, 870, 138
    APOGEE DR14/DR15 Abundances in the Inner Milky Way
27. Rowlands, K., et al., 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 2544
    SDSS-IV MaNGA: spatially resolved star formation histories and the connection to galaxy physical properties
26. Parikh, T., et al., 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 3954
    SDSS-IV MaNGA: the spatially resolved stellar initial mass function in ∼400 early-type galaxies
25. Penny, S. J., et al., 2018, *Monthly Notices of the Royal Astronomical Society*, 476, 979
    SDSS-IV MaNGA: evidence of the importance of AGN feedback in low-mass galaxies
24. Abolfathi, B., et al., 2018, *The Astrophysical Journal Supplement Series*, 235, 42
    The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the Extended Baryon Oscillation Spectroscopic Survey and from the Second Phase of the Apache Point Observatory Galactic Evolution Experiment
23. Talbot, M. S., et al., 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 195
    SDSS-IV MaNGA: the spectroscopic discovery of strongly lensed galaxies
22. Wylezalek, D., et al., 2018, *Monthly Notices of the Royal Astronomical Society*, 474, 1499
    SDSS-IV MaNGA: identification of active galactic nuclei in optical integral field unit surveys
21. Badenes, C., et al., 2018, *The Astrophysical Journal*, 854, 147
    Stellar Multiplicity Meets Stellar Evolution and Metallicity: The APOGEE View
20. Albareti, F. D., et al., 2017, *The Astrophysical Journal Supplement Series*, 233, 25
    The 13th Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-IV Survey Mapping Nearby Galaxies at Apache Point Observatory
19. Greene, J. E., et al., 2017, *The Astrophysical Journal*, 851, L33
    SDSS-IV MaNGA: Probing the Kinematic Morphology-Density Relation of Early-type Galaxies with MaNGA
18. Zasowski, G., et al., 2017, *The Astronomical Journal*, 154, 198
    Target Selection for the SDSS-IV APOGEE-2 Survey
17. Zahid, H. J., et al., 2017, *The Astrophysical Journal*, 847, 18
    Stellar Absorption Line Analysis of Local Star-forming Galaxies: The Relation between Stellar Mass, Metallicity, Dust Attenuation, and Star Formation Rate

16. Martínez-Rodríguez, H., et al., 2017, *The Astrophysical Journal*, 843, 35
    Observational Evidence for High Neutronization in Supernova Remnants: Implications
    for Type Ia Supernova Progenitors

15. Blanton, M. R., et al., 2017, *The Astronomical Journal*, 154, 28
    Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies, and the Distant
    Universe

14. Linden, S. T., et al., 2017, *The Astrophysical Journal*, 842, 49
    Timing the Evolution of the Galactic Disk with NGC 6791: An Open Cluster with
    Peculiar High-α Chemistry as Seen by APOGEE

13. Zhang, K., et al., 2017, *Monthly Notices of the Royal Astronomical Society*, 466, 3217
    SDSS-IV MaNGA: the impact of diffuse ionized gas on emission-line ratios,
    interpretation of diagnostic diagrams and gas metallicity measurements

12. Jones, A., et al., 2017, *Astronomy and Astrophysics*, 599, A141
    SDSS IV MaNGA: Deep observations of extra-planar, diffuse ionized gas around
    late-type galaxies from stacked IFU spectra

11. Yan, R., et al., 2016, *The Astronomical Journal*, 152, 197
    SDSS-IV MaNGA IFS Galaxy Survey—Survey Design, Execution, and Initial Data
    Quality

10. Law, D. R., et al., 2016, *The Astronomical Journal*, 152, 83
    The Data Reduction Pipeline for the SDSS-IV MaNGA IFU Galaxy Survey

 9. Holtzman, J. A., et al., 2015, *The Astronomical Journal*, 150, 148
    Abundances, Stellar Parameters, and Spectra from the SDSS-III/APOGEE Survey

 8. Hayden, M. R., et al., 2015, *The Astrophysical Journal*, 808, 132
    Chemical Cartography with APOGEE: Metallicity Distribution Functions and the
    Chemical Structure of the Milky Way Disk

 7. Alam, S., et al., 2015, *The Astrophysical Journal Supplement Series*, 219, 12
    The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data
    from SDSS-III

 6. Nidever, D. L., et al., 2014, *The Astrophysical Journal*, 796, 38
    Tracing Chemical Evolution over the Extent of the Milky Way's Disk with APOGEE
    Red Clump Stars

 5. Bovy, J., et al., 2014, *The Astrophysical Journal*, 790, 127
    The APOGEE Red-clump Catalog: Precise Distances, Velocities, and High-resolution
    Elemental Abundances over a Large Area of the Milky Way's Disk

 4. Ahn, C. P., et al., 2014, *The Astrophysical Journal Supplement Series*, 211, 17
    The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from
    the SDSS-III Apache Point Observatory Galactic Evolution Experiment

 3. Leja, J., et al., 2013, *The Astrophysical Journal*, 778, L24
    Exploring the Chemical Link between Local Ellipticals and Their High-redshift
    Progenitors

 2. Zasowski, G., et al., 2013, *The Astronomical Journal*, 146, 81
    Target Selection for the Apache Point Observatory Galactic Evolution Experiment
    (APOGEE)

 1. Ahn, C. P., et al., 2012, *The Astrophysical Journal Supplement Series*, 203, 21
    The Ninth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from
    the SDSS-III Baryon Oscillation Spectroscopic Survey

ADDITIONAL   3. Cherinka, B., et al., 2020, *ASPC*, 527, 743C
    Marvin: A Toolkit for Streamlined Access and Visualisation of the SDSS-IV MaNGA
    Data Set

 2. Wilson, J. C., et al., 2012, *SPIE*, 8446, 84460H
    Performance of the Apache Point Observatory Galactic Evolution Experiment
    (APOGEE) high-resolution near-infrared multi-object fiber spectrograph

 1. **Andrews, B. H.** & Thompson, T. A., 2011, *EAS Publications Series*, 52, 275
    Radiation Pressure Feedback in Galaxies

BRETT H. ANDREWS

Presentations

INVITED	Effective Plotting	2021
	DESI Collaboration Meeting	
	Hidden in Plain Sight: a Deep Learning Approach to Finding Supernovae in Galaxy Maps	2018
	Science 2018, University of Pittsburgh	
	The SDSS-IV MaNGA Survey: Galaxy Dissection on an Industrial Scale	2017
	CMU Astro Seminar, Carnegie Mellon University	
	The Mass–Metallicity Relation in SDSS Using Electron Temperature Measurements	2015
	Understanding Nebular Emission in High-Redshift Galaxies, The Carnegie Observatories	
CONTRIBUTED	Jumpstart Your Paper	2022
	AstroPGH Summer Seminar, University of Pittsburgh	
	AstroCoffee Tips	2022
	AstroPGH Summer Seminar, University of Pittsburgh	
	Leveraging Statistics and Machine Learning for Probing Galaxy Evolution and Measuring Galaxy Distances	2022
	AstroLunch Seminar, University of Pittsburgh	
	Effective Plotting	2021
	AstroPGH Summer Seminar, University of Pittsburgh	
	Effective Plotting	2020
	AstroPGH Summer Seminar, University of Pittsburgh	
	Effective Plotting	2018
	Astro Student Seminar, University of Pittsburgh	
	GitHub Flow	2018
	Astro Student Seminar, University of Pittsburgh	
	MaNGA DAP	2017
	SDSS-IV Collaboration Meeting, Pontificia Universidad Católica de Chile	
	Streamlining MaNGA Data with Marvin	2017
	AstroLunch, University of Pittsburgh	
	The State of Marvin	2016
	SDSS-IV Collaboration Meeting, University of Wisconsin	
	AstroCoffee Presentation Advice	2016
	Astro Student Seminar, University of Pittsburgh	
	Marvin-tools: Distilling DAP Measurements and & Stacking Spectra	2016
	MaNGA Collaboration Meeting (Cocoa Beach, FL)	
	Global vs. Resolved Metallicities	2015
	Astro Student Seminar, University of Pittsburgh	
	Global vs. Resolved Metallicities	2015
	SDSS-IV Collaboration Meeting, Instituto Física Teórica Universidad Autónoma de Madrid	
	MaNGA Data Analysis Pipeline Quality Assessment	2015
	MaNGA Collaboration Meeting, University of Kentucky	
	Principal Component Abundance Analysis: APOGEE and flexCE	2015
	Local Group Astrostatistics Conference, University of Michigan	
	Understanding the Bimodality in [alpha/Fe] with a Chemical Evolution Model	2014
	SDSS-III Collaboration Meeting (Park City, UT)	
	Applying Principal Component Analysis to APOGEE	2014
	SDSS-IV Collaboration Meeting (Park City, UT)	
	Exploiting Large Multi-element Stellar Abundance Surveys	2014
	AAS Winter Meeting	
	Decoding Galactic Chemical Evolution with Gas-phase and Stellar Abundances	2013
	Colloquium, University of Wisconsin	

Yields, Delays, and Mixing in Chemical Evolution Models   2013
  SDSS-II Collaboration Meeting, Johns Hopkins University
Decoding Galactic Chemical Evolution with Gas-phase and Stellar Abundances   2013
  Yale Center for Astronomy & Astrophysics Seminar, Yale University
The Mass–Metallicity Relation: A Window Into Galaxy Evolution   2013
  Seminar, National Radio Astronomical Observatory
The Galaxy Mass–Metallicity Relation: A Sensitive Diagnostic of the Processes That Drive   2013
  Galaxy Evolution
  Edward F. Hayes Graduate Research Forum, The Ohio State University
Characterizing the Distribution of Stars in Chemical Abundance Space   2013
  APOGEE Collaboration Meeting, The Carnegie Observatories
Accounting for Stellar Abundance Uncertainties in Principal Component Abundance   2012
  Analysis
  APOGEE Collaboration Meeting, Texas Christian University
Principal Component Abundance Analysis: Finding the Principal Components of Chemical   2011
  Abundance Space
  SDSS-III Collaboration Meeting, Vanderbilt University
Radiation Pressure Feedback in Galaxies   2011
  Edward F. Hayes Graduate Research Forum, The Ohio State University

POSTERS | Principal Component Abundance Analysis and Chemical Evolution Models   2014
          The Near-Field Deep-Field Connection, University of California, Irvine
        Assessing Radiation Pressure as a Feedback Mechanism in Star-forming Galaxies   2011
          The 5th Zermatt ISM Symposium