Curriculum Vitae – Rachael M. Roettenbacher

Contact Information

Yale Center for Astronomy and Astrophysics
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Education

University of Michigan, Ann Arbor, MI, USA — September 2011–April 2016
Ph.D. in Astronomy and Astrophysics — April 2016
Advisor: John D. Monnier
Shifting the Starspot Paradigm through Imaging Magnetic Structures and Evolution
M.S. in Astronomy and Astrophysics — December 2013
NASA/UNCF Harriet G. Jenkins Pre-doctoral Fellow — 2011–2013
Lehigh University, Bethlehem, PA, USA — August 2008–May 2011
M.S. in Physics — January 2010
NASA/UNCF Harriet G. Jenkins Pre-doctoral Fellow — 2010–2011
U.S. Dept. of Edu. Graduate Assistance in Areas of National Need Fellow — 2008–2010
Ohio Wesleyan University, Delaware, OH, USA — August 2005–May 2008
B.A. in Astrophysics and Mathematics, *cum laude* — May 2008

Professional Appointments

Yale University, New Haven, CT, USA — September 2018–present
Yale Center for Astronomy and Astrophysics Prize Postdoctoral Fellow
Stockholm University, Stockholm, Sweden — August 2016–July 2018
Postdoctoral Research Fellow

Refereed Articles, First Author

10. Roettenbacher, R. M. *Invited Review*
2019, Contr. of the Astr. Obs. Skalnaté Pleso, Slovakia, 49, 97
"Interferometry with Meter-Class Telescopes"

9. Roettenbacher, R. M. & Vida, K.
2018, ApJ, 868, 3
"The connection between starspots and flares on main-sequence *Kepler* stars"

8. Roettenbacher, R. M. & Kane, S. R.
2017, ApJ, 851, 77
"The Stellar Activity of TRAPPIST-1 and Consequences for the Planetary Atmospheres"

7. Roettenbacher, R. M., Monnier, J. D., Korhonen, H., +7 coauthors
2017, ApJ, 849, 120
"Contemporaneous imaging comparisons of the spotted giant σ Geminorum using interferometric, spectroscopic, and photometric data"

6. Roettenbacher, R. M., Kane, S. R., Monnier, J. D., & Harmon, R. O.
2016, ApJ, 832, 207
"KOI-1003: A new spotted, eclipsing RS CVn binary in the *Kepler* field"

5. Roettenbacher, R. M., Monnier, J. D., Korhonen, H. +12 coauthors
2016, **Nature**, 533, 217
"No Sun-like dynamo on the active star ζ Andromedae from starspot asymmetry"

4. **Roettenbacher, R. M.**, Monnier, J. D., Fekel, F. C., +14 coauthors
   2015, ApJ, 809, 159
   "Detecting the Companions and Ellipsoidal Variations of RS CVn Primaries: II. *o* Draconis, a Candidate for Low-Mass Companion Ingestion"
3. **Roettenbacher, R. M.**, Monnier, J. D., Henry, G. W., +17 coauthors
   2015, ApJ, 807, 23
   "Detecting the Companions and Ellipsoidal Variations of RS CVn Primaries: I. σ Geminorum"
2. **Roettenbacher, R. M.**, Monnier, J. D., Harmon, R. O., Barclay, T., & Still, M.
   2013, ApJ, 767, 60
   "Imaging Starspot Evolution on Kepler Target KIC 5110407 Using Light-Curve Inversion"
1. **Roettenbacher, R. M.**, Harmon, R. O., Vutisalchavakul, N., & Henry, G. W.
   2011, AJ, 141, 138
   "A Study of Differential Rotation on II Pegasi via Photometric Starspot Imaging"

Refereed Articles, Coauthor

18. Kane, S. R., **Roettenbacher, R. M.**, Unterborn, C. T., Foley, B. J, & Hill, M. L.
    To be submitted to AAS Journals March 2020
    "Atmosphere Sustainability of LHS 3844b"
17. Gallenne, A. + 10 coauthors, **Roettenbacher, R. M.**, +1 coauthor
    2019, A&A, 622, 164
    "Multiplicity of Galactic Cepheids from long-baseline interferoemtry. IV. New detected companions from MIRC and PIONIER observations"
16. Gallenne, A. +13 coauthors, **Roettenbacher, R. M.**, +6 coauthors
    2018, ApJ, 867, 121
    "A geometrical 1% distance to the short-period binary Cepheid V1334 Cygni"
15. De Rosa, G. +75 coauthors, **Roettenbacher, R. M.**, +25 coauthors
    2018, ApJ, 866, 133
    "Velocity-resolved reverberation mapping of five bright Seyfert 1 galaxies"
14. Hoard, D. W., Howell, S. B., **Roettenbacher, R. M.**, +3 coauthors
    2018, AJ, 156, 119
    "Kepler, Spitzer, and Hubble observations of the variable white dwarf BOKS 53856: Non-uniform metal absorption in dark spots"
13. Vida, K. & **Roettenbacher, R. M.**
    2018, A&A, 616, 163
    "Finding flares in *Kepler* data using machine-learning tools"
12. Schaefer, G. H., Cassan, A., Gallenne, A., & **Roettenbacher, R. M.**
    2018, Exp. Astron., 46, 421
    "Interferometry in the Era of Time-Domain Astronomy"
11. Gardner, T., +13 coauthors, **Roettenbacher, R. M.**, +5 coauthors
    2018, ApJ, 855, 1
    "Precision orbit of δ Delphini and prospects for astrometric detection of exoplanets"
10. Hummel, C. A., Monnier, J. D., **Roettenbacher, R. M.**, +12 coauthors
    2017, ApJ, 844, 115
    "Orbital elements and stellar parameters of the active binary UX Arietis"
9. Kochukhov, O., +10 coauthors, **Roettenbacher, R. M.**, +1 coauthor
   2017, AN, 338, 428
   "Surface magnetism of cool stars"

8. Gallenne, A., +4 coauthors, **Roettenbacher, R. M.**, +8 coauthors
   2016, MNRAS, 461, 1451
   "Multiplicity of Galactic Cepheids from long-baseline interferometry. III. Constraints on the new spectroscopic companion of δ Cephei"
7. Gallenne, A., +7 coauthors, **Roettenbacher, R. M.**, +9 coauthors
   2015, A&A, 579, 68
   "Robust high-contrast companion detection from interferometric observations. The CANDID algorithm and an application to six binary Cepheids"
6. Schaefer, G. H., +24 coauthors, **Roettenbacher, R. M.**, +11 coauthors
   2014, **Nature**, 515, 234
   "The expanding fireball of Nova Delphini 2013"
5. White, T. R., +9 coauthors, **Roettenbacher, R. M.**, +10 coauthors
   2013, MNRAS, 433, 1262
   "Interferometric radii of bright Kepler stars with the CHARA Array: θ Cygni and 16 Cygni A and B"
4. Barclay, T., Still, M., Jenkins, J. M., Howell, S. B., & **Roettenbacher, R. M.**
   2012, MNRAS, 422, 1219
   "Serendipitous Kepler observations of a background dwarf nova of SU UMa type"
3. Napoli, V. J., McSwain, M. V., Marsh Boyer, A. N., & **Roettenbacher, R. M.**
   2011, PASP, 123, 1262
   "The Distance of the Gamma-ray Binary 1FGL J1018.6-5856"
2. McSwain, M. V., +7 coauthors, **Roettenbacher, R. M.**
   2010, AJ, 139, 857
   "Multiwavelength Observations of the Runaway Binary HD 15137"
1. Aragona, C., +3 coauthors, **Roettenbacher, R. M.**, +3 coauthors
   2009, ApJ, 698, 514
   "Hα Emission Variability in the γ-ray Binary LS I +61 303"

Contributed Articles

9. Ridgway, S., +7 coauthors, **Roettenbacher, R. M.**, +1 coauthor
   2019, BAAS, 51g, 157
   Astro2020 Decadal Survey APC white paper
   "Revitalizing the Optical/Infrared Interferometry Community in the U.S."
8. **Roettenbacher, R. M.**, Norris, R. P., Baron, F., +9 coauthors
   2019, BAAS, 51c, 181
   Astro2020 Decadal Survey science white paper
   "High Angular Resolution Astronomy: Resolving Stellar Surface Features"
7. **Roettenbacher, R. M.**, Monnier, J. D., Che, X., +8 coauthors
   2015, Proc. of Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, 18, 907
   "Pushing the (Convective) Envelope: Imaging Spotted Stellar Surfaces with Optical Interferometry"
6. **Roettenbacher, R. M.**, Monnier, J. D., & Harmon, R. O.
   2015, Proc. of Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, 18, 377
   "Investigating the Flare Activity of the Spotted Kepler Star KIC 5110407"
5. **Roettenbacher, R. M.**, Monnier, J. D., Harmon, R. O., & Korhonen H.
   2014, Proceedings IAU Symp., 302, 212
   "The new age of spotted star research using Kepler and CHARA"

4. Roettenbacher, R. M. & McSwain, M. V.
2011, Proc. IAU Symp., 272, 545
"Light curves of the Be stars of NGC 3766"

3. Grundstrom, E. D., +6 coauthors, **Roettenbacher, R. M.**, +2 coauthors
2011, Proc. IAU Symp., 272, 290
"Spectroscopic Hα and Hγ survey of field Be stars: 2004-2009"

2. Grundstrom, E. D., +4 coauthors & **Roettenbacher, R. M.**
2011, Proc. Liège Astrophysical Colloquium, 80, 371
"Observations of Be Disk Building: Optical Spectra of NW Ser (HD 168797) over 35 days"

1. Roettenbacher, R. M., Amouzou, E. C., & McSwain, M. V.
2010, Proc. IAU Symp., 266, 518
"Nonradial pulsations in the open cluster NGC 3766"

Other Articles

1. Roettenbacher, R. M.
2016, Aeon Magazine, ed. C. S. Powell
"How the face of a distant star reveals our place in the cosmos"

Selected Awards

· Yale Center for Astronomy and Astrophysics Prize Postdoctoral Fellowship, Yale University, 2018–2021
· Marie Skłodowska-Curie Individual Fellowship, European Research Council, 2018 (declined)
· Ralph B. Baldwin Prize in Astrophysics and Space Sciences, University of Michigan, 2018
· Olivier Chesneau Prize for the best PhD thesis in high-angular resolution astronomy, Observatoire de la Côte d'Azur/ESO, 2017
· ESO Postdoctoral Fellowship, 2016 (declined)
· NASA Harriet G. Jenkins Pre-Doctoral Fellowship, NASA/UNCF Special Programs, 2010–2013
· Graduate Assistance for Areas of National Need (GAANN) Fellowship, U.S. Dept. of Edu., 2008–2010
· Faculty Scholarship, Ohio Wesleyan University, 2005–2008
· Dean's List (all semesters), Ohio Wesleyan University, 2005–2008
· Outstanding Undergraduate Research Award, Society of Physics Students, 2008
· Finalist for Undergraduate Research Award, Vanderbilt University, 2008
· Rusk Prize for Excellence in Physics, Ohio Wesleyan University, 2008
· Research Experience for Undergraduates, Lehigh University, 2007
· Superior rating in Undergraduate Research, Sigma Xi National Research Society, 2006
· Summer Science Research Program, Ohio Wesleyan University, 2006
· Robert and Elizabeth Muller Award for Promise in Physics, Ohio Wesleyan University, 2006
· Florence Leas Prize in Mathematics, Ohio Wesleyan University, 2006

Selected Grants

· Yale Center for Astronomy and Astrophysics Post-Doctoral Fellowship, 2018–2021 ($252,000; $48,000 for research support)
· Dahlmark Grant, Stockholm University, 2018 (5,000 SEK)
· Travel Grant, Exoclipse Conference, Boise State University, 2017 ($1,087)
· Rackham Graduate Student Travel Grant (four), University of Michigan, 2011–2015 ($700, $950, $1,050, and $1,050)

· Sigma Xi Grants-in-Aid of Research (two), Sigma Xi National Research Society, 2010 ($5,000) and 2014 ($4,000)
· Rackham Graduate Student Research Grant (two), University of Michigan, 2012 ($1,500) and 2013 ($3,000)
· Travel Grant (two), International Astronomical Union, 2009 and 2013, ($500, €369)
· *Kepler* Guest Observer Cycle 4 funding, 2012 ($20,916)
· NASA/UNCF Special Programs Harriet G. Jenkins Pre-Doctoral Fellowship, 2010–2013 ($96,000)
· Travel Grant, American Astronomical Society, 2009 ($1,200)
· Mihoko Yoshida-Dierolf Travel Award, Lehigh University, 2009 ($500)

Research Presentations

Seminars and Colloquia
· Stars & Planets, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, USA, 2020 (postponed due to COVID-19)
· University of California–Riverside, Riverside, CA, USA, 2019
· Georgia State University, Atlanta, GA, USA, 2019
· Boston University, Boston, MA, USA, 2019
· Kavli Institute for Theoretical Physics, University of California–Santa Barbara, Santa Barbara, CA, USA, 2019
· American Museum of Natural History, New York City, NY, USA, 2019
· University of Delaware, Newark, DE, USA, 2019
· Konkoly Observatory of the Hungarian Academy of Sciences, Budapest, Hungary, 2019
· Yale University, New Haven, CT, USA, 2018
· Newcastle University, Newcastle upon Tyne, United Kingdom, 2018
· NASA Goddard Space Flight Center, Greenbelt, MD, USA, 2018
· University of Oslo, Oslo, Norway, 2018
· University of Michigan, Ann Arbor, MI, USA, 2018 (Baldwin Prize lecture)
· University of Exeter, United Kingdom, 2018
· University of Chicago, Chicago, IL, USA, 2018
· Konkoly Observatory of the Hungarian Academy of Sciences, Budapest, Hungary, 2017
· Onsala Space Observatory, Chalmers University of Technology, Onsala, Sweden, 2017
· Uppsala University, Uppsala, Sweden, 2016
· Stockholm University, Stockholm, Sweden, 2016
· Vanderbilt University, Nashville, TN, USA, 2015
· Tuorla Observatory, University of Turku, Turku, Finland, 2015
· Radio & Geoastronomy Division, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, USA, 2015
· Ohio Wesleyan University, Delaware, OH, USA, 2014

Invited Conference Presentations
· Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun 21, Toulouse, France, 2020 (in Modelling Stellar Atmospheres: Advances Brought by Solar Know-How splinter; postponed due to COVID-19)
· SPIE Astronomical Telescopes + Instrumentation, Optical and Infrared Interferometry and Imaging, Yokohama, Japan, 2020 (postponed due to COVID-19)
· TASC5/KASC12 Workshop, Cambridge, MA, USA, 2019
· High Angular Resolution View of Stars splinter, AAS Meeting 233, Seattle, WA, USA, 2019

· Observing techniques, instrumentation, and science for metre-class telescopes II, Tatranská Lomnica, Slovakia, 2018
· ESO Workshop on Imaging of Stellar Surfaces, Garching, Germany, 2018
· The Physics of Evolved Stars II: the role of binarity, Nice, France, 2017 (Chesneau Prize lecture)
· Solar-Stellar Connections Workshop, Ann Arbor, MI, USA, 2015
· Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun 18, Flagstaff, AZ, USA, 2014 (in Stellar Surfaces with High Spatial and Temporal Resolution splinter)

Contributed Conference Presentations
· The Sharpest Eyes on the Sky: A 2020 vision for high angular resolution astronomy, Exeter, UK, 2020 (postponed due to COVID-19)
· AAS Meeting 235, Honolulu, HI, USA, 2020 (poster)
· 16$^{\text{th}}$ Potsdam Thinkshop: The Rotation Periods of Cool Stars, Potsdam, Germany, 2019 (talk)
· CHARA/NPOI Collaboration Meeting, Flagstaff, AZ, USA, 2019 (talk)
· AAS Meeting 233, Seattle, WA, USA, 2019 (poster)
· Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun 20, Boston, MA, USA, 2018 (plenary talk)
· CHARA Collaboration Meeting, Paris, France, 2018 (talk)
· Astronomdagarna, Kiruna, Sweden, 2017 (talk)
· Exoclipse: Exploring New Worlds in the Shade, Boise, ID, USA, 2017 (talk)
· 14$^{\text{th}}$ Potsdam Thinkshop: Stellar Magnetism, Potsdam, Germany, 2017 (talk)
· IAU Symp. 328: Living Around Active Stars, Maresias, Brazil, 2016 (talk)
· CHARA Collaboration Meeting, Nice, France, 2016 (talk)
· Magnetic Intermediate Mass Stars, Bagnères-di-Bigorre, France, 2016 (talk)
· AAS Meeting 227, Orlando, FL, USA, 2016 (dissertation talk)
· Focus Meeting 13: The Sun and Sunlike Stars, IAU General Assembly XXIX, Honolulu, HI, USA, 2015 (talk)
· CHARA Collaboration Meeting, Atlanta, GA, USA, 2015 (talk)
· Solarnet: Solar and Stellar Magnetic Activity, Palermo, Italy, 2015 (talk)
· AAS Meeting 225, Seattle, WA, USA, 2015 (poster)
· Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun 18, Flagstaff, AZ, USA, 2014 (poster)
· CHARA Collaboration Meeting, Ann Arbor, MI, USA, 2014 (talk)
· XXV Canary Islands Winter School of Astrophysics: Cosmic Magnetic Fields, La Laguna, Tenerife, Canary Islands, Spain, 2013 (talk)
· IAU Symp. 302: Magnetic Fields Throughout Stellar Evolution, Biarritz, Paris, 2013 (talk)
· CHARA/NPOI Collaboration Meeting, Flagstaff, AZ, USA, 2013 (talk)
· AAS Meeting 219, Austin, TX, USA, 2012 (talk)
· AAS Meeting 217, Seattle, WA, USA, 2011 (poster)
· IAU Symp. 272: Active OB Stars: Structure, Evolution, Mass Loss, and Critical Limits, Paris, France, 2010 (poster)
· IAU Working Group on Active B Stars, IAU General Assembly XXVII, Rio de Janeiro, Brazil, 2009 (talk)
· IAU Symp. 266: Star Clusters, IAU General Assembly XXVII, Rio de Janeiro, Brazil, 2009 (poster)
· AAS Meeting 213, Long Beach, CA, USA, 2009 (poster)
· International Conference for Physics Students, Kraków, Poland, 2008 (talk)
· Meeting of the Ohio-Region Section of the APS, Oxford, OH, USA, 2007 (poster)

· AAS Meeting 209, Seattle, WA, USA, 2007 (poster)
· Meeting of the Ohio-Region Section of the APS, Orrville, OH, USA, 2006 (poster)
· Sigma Xi Annual Meeting and Student Research Conference, Detroit, MI, USA, 2006 (poster)

Selected Observing Proposals

· **Roettenbacher, R. M.**, Korhonen, H., Berdyugina, S., et al., 5 nights at CHARA with MIRC-X, 2019B NOAO
"Interferometric Imaging of the Spotted Star σ Geminorum with Simultaneous Spectropolarimetry
· **Roettenbacher, R. M.**, Korhonen, H., & Henry, G. W., 12 nights at CHARA with MIRC-X, NOAO longterm program (3 nights 2019A, 9 nights 2019B)
"Interferometrically Detecting and Measuring Differential Rotation on the Spotted Giant ζ Andromedae"
· **Roettenbacher, R. M.**, Monnier, J. D., Korhonen, H., et al., 4 nights at CHARA with MIRC-X, 2018B
"MIRC-X imaging of the spotted surface of ϵ Eri, a planet-hosting, main-sequence star"
· **Roettenbacher, R. M.**, Monnier, J. D., & Harmon, R. O., 19 visits on CTIO SMARTS 1.3-m, 2017B NOAO
"Photometric Imaging of the Spotted Star UX Ari"
· **Roettenbacher, R. M.**, Monnier, J. D., Korhonen, H., et al., 3 nights at CHARA with MIRC, 2017B
"Imaging the Spotted, Active Giant of UX Ari with MIRC"
· **Roettenbacher, R. M.** & Monnier, J. D., 7 nights at CHARA with MIRC, 2017A
"Imaging the Spotted RS CVn Variable TZ CrB"
· **Roettenbacher, R. M.**, Monnier, J. D., & Hummel, C., 13 nights at CHARA with MIRC, 2016
"Imaging the Spotted Surfaces of UX Ari and TZ Tri with MIRC"
· **Roettenbacher, R. M.**, Monnier, J. D., & Mérand, A., 3 nights at CHARA with MIRC, 2015-1
"Imaging Stellar Activity and Searching for Companions of 61 Cygni A and B"
· **Roettenbacher, R. M.**, Monnier, J. D., Baron, F., et al., 10 nights at CHARA with MIRC, 2014
"Detecting the faint main-sequence companions of the spotted giants of RS CVn systems"
· Monnier, J. D., **Roettenbacher, R. M. (Science PI)**, & Harmon, R. O., targets, Cycle 5 *Kepler* Guest Observer Program (not observed due to reaction wheel failure)
"Extreme Starspots II"
· **Roettenbacher, R. M.**, Monnier, J. D., Che, X., et al., 18 nights at CHARA with MIRC, 2013
"Resolving the Spotted Surface of ζ And with simultaneous interferometric, Doppler, and Photometric Imaging"
· **Roettenbacher, R. M.**, Monnier, J. D., & Korhonen, H., 18 visits on CTIO SMARTS 1.3-m, 2013B NOAO
"Resolving the Spotted Surface of ζ And with Simultaneous Interferometric, Doppler, and Photometric Imaging"
· **Roettenbacher, R. M.**, Monnier, J. D., & Harmon, R. O., 1 night at KPNO 4-m, 2013A NOAO
"Breaking the Inclination Degeneracy: Accurate Spot Modeling of Young Solar Analogs"
· **Roettenbacher, R. M.**, Monnier, J. D., Che, X., et al, 9 nights at CHARA with MIRC, 2012-2
"Resolving the Spotted Surface of σ Gem with Simultaneous Interferometric, Doppler, and Photometric Imaging"

· **Roettenbacher, R. M.**, Monnier, J. D., Harmon, R. O., & Korhonen, H., 20 visits on CTIO SMARTS 1.3-m, 2012B NOAO
"Photometric Observations of σ Gem with Simultaneous Interferometric and Doppler Imaging"
· **Roettenbacher, R. M.**, Monnier, J. D., Che, X., & Korhonen, H., 13 nights at CHARA with MIRC, 2012-1
"Resolving the spotted surfaces of o Dra and ϵ UMa with simultaneous interferometric and Doppler imaging"
· Monnier, J. D., **Roettenbacher, R. M. (Science PI)**, Harmon, R. O., & Barclay, T., targets and funding, Cycle 4 *Kepler* Guest Observer Program Observing Proposal
"Extreme Starspots"
· **Roettenbacher, R. M.**, Monnier, J. D., & Barclay, T., CCDS spectrograph for 4 nights on 2.4-m and 6 nights on 1.3-m, UM 2012A MDM Observing Proposal
"Obtaining Measures of $v \sin i$ for Spotted *Kepler* Targets"

Observing Experience

· Mount Wilson Observatory, CHARA Interferometer with the Michigan Infrared Combiner (MIRC/MIRC-X), 123 nights (2011–2019), and CLIMB, 3 nights (2014)
· Kitt Peak National Observatory, 4-m with Échelle spectrograph, 1 night (2013)
· MDM Observatory, 1.3-m with CCDS spectrograph and R4K imager, 19 nights (2012–2013)
· MDM Observatory, 2.4-m with CCDS spectrograph, 4 nights (2012)
· Cerro Tololo Inter-American Observatory, 0.9-m telescope, 28 nights (2009–2011)
· Kitt Peak National Observatory, 0.9-m Coudé Feed telescope, 7 nights (2008)

Service and Outreach

· Referee for AAS Journals, A&A, PASP, and others, 2015–present
· Co-organizer, Visibility in Interferometry, promotion of underrepresented groups in interferometry, 2018–present
· Co-organizer, Yale Astronomy & Astrophysics Colloquium Series, 2019–present
· Yale University Internal Palomar/Keck Observatory TAC, 2020A–B
· Mentor, AstroSibs, Mentoring of Yale undergraduates majoring in astronomy, 2018–present
· Science Organizing Committee, Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun 21, 2020 (postponed due to COVID-19)
· Science Program Committee, SPIE Astronomical Telescopes + Instrumentation, Optical and Infrared Interferometry and Imaging VII, 2020 (postponed due to COVID-19)
· Science Organizing Committee, The Sharpest Eyes on the Sky: A 2020 vision for high angular resolution astronomy, 2020 (postponed due to COVID-19)
· Science Organizing Committee, TESS Ninja 2 Collaborative Workshop, 2019
· Attendee, Early Career Focus Session for the Decadal Survey for Astronomy & Astrophysics, 2018
· Co-organizer of Cool Stars 20 splinter session (Know Thy Starspot, Know Thy Star), Boston, MA, USA, 2018
· Science Organizing Committee, 9th VLTI Summer School, Lisbon, Portugal, 2018
· Stars and Planets Group Meeting creator and leader, Stockholm University, 2017–2018
· Participant for STEM Voices and Astronomisk Ungdom (Sweden) podcasts, 2017, 2019
· PhD candidate selection committee, Stockholm University, 2016
· Chambliss Award Judge for the AAS, 2016, 2019
· Astrocoffee Organizer, morning astro-ph discussion, 2013–2015
· University of Michigan Internal Magellan/MDM Observatory TAC, 2015A
· Local Organizing Committee, CHARA Collaboration Meeting, Ann Arbor, MI, USA, 2014

· University of Michigan Internal SWIFT TAC, 2014A

Teaching Experience

· **Center for Integration of Research, Teaching, and Learning (CIRTL) Network, Massive Open Online Course (MOOC)**, 2018
An Introduction to Evidence-Based Undergraduate STEM Teaching Completion certificate with distinction

· **Undergraduate Student Research Co-Advisor**, 2017–2019
Advising an undergraduate student on a project on stellar activity in the *Kepler* field.
Co-advising with B. T. Montet, University of Chicago

· **PhD Student Research Co-Advisor, Stockholm University**, 2017–2018
Advising a PhD student on a project on stellar activity and the solar-stellar connection.

· **Graduate Student Instructor Mentor, University of Michigan**, 2014–2015
Oversaw graduate student instructors for introductory astronomy classes.
Provided graduate student instructors with teaching guidance.

· **Graduate Student Instructor, University of Michigan**, Winter 2011
Taught introductory astrophysics laboratories (ASTRO 201).

· **Teaching Assistant, Lehigh University**, Fall 2009
Taught introductory physics recitation (PHY 11).

· **Teaching Assistant, Lehigh University**, Fall 2008
Taught introductory astronomy laboratories (PHY 8 & ASTR 8).