

Trey V. Wenger (he/him)



NSF ASTRONOMY & ASTROPHYSICS POSTDOCTORAL FELLOW

University of Wisconsin-Madison

3512 Sterling Hall

475 N. Charter Street

Madison, WI 53706-1507 USA

✉ twenger2@wisc.edu | 🏠 www.treywenger.com

Research interests: Milky Way structure; interstellar medium; high-mass star formation; radio astronomy; astrostatistics; Bayesian modeling; machine learning; inclusive pedagogy and active learning strategies

Education

University of Virginia

PH.D. IN ASTRONOMY, M.S. IN ASTRONOMY

- Dissertation: “Structure in the Milky Way”
- Advisor: Dana S. Balser, National Radio Astronomy Observatory

Charlottesville, Virginia

Aug. 2013 - May 2019

Boston University

B.A. IN ASTRONOMY AND PHYSICS, *summa cum laude*

- *Phi Beta Kappa*
- College Prize in Astronomy
- Institute for Astrophysical Research Prize

Boston, Massachusetts

Aug. 2009 - May 2013

Employment

NSF Astronomy & Astrophysics Postdoctoral Fellow

UNIVERSITY OF WISCONSIN-MADISON

Madison, Wisconsin

Sep 2022 - Present

Covington Postdoctoral Fellow

DOMINION RADIO ASTROPHYSICAL OBSERVATORY

Penticton, BC, Canada

Aug 2019 - Aug 2022

Research Fellow

UNIVERSITY OF VIRGINIA

- Advisor: Dana S. Balser, National Radio Astronomy Observatory

Charlottesville, Virginia

Aug 2013 - May 2019

Teaching Assistant

UNIVERSITY OF VIRGINIA

- Introduction to Cosmology (Undergraduate)
- Research Methods in Astrophysics (Undergraduate)
- Observational Astronomy (Graduate)
- Introduction to Cosmology (Undergraduate)
- Observational Astronomy (Undergraduate)
- Duties: guest lectures, office hours, observational labs, assignment and exam grading

Charlottesville, Virginia

Aug 2014 - May 2016

Instructor

UNIVERSITY OF VIRGINIA

- Stars, Galaxies, and the Universe (Undergraduate)
- Duties: course design, lectures, assignment and exam design and grading, observational labs

Charlottesville, Virginia

Jul 2014 - Aug 2014

Research Assistant

BOSTON UNIVERSITY

- Advisor: T. M. Bania, Boston University

Boston, Massachusetts

Aug 2012 - May 2013

REU Student

NATIONAL RADIO ASTRONOMY OBSERVATORY

- Advisor: Dana S. Balser, National Radio Astronomy Observatory

Charlottesville, Virginia

Jun 2012 - Aug 2012

REU Student

ARECIBO OBSERVATORY

- Advisor: Tapasi Ghosh and Chris Salter, Arecibo Observatory

Puerto Rico

May 2011 - Aug 2011

Assistant Curator

J. B. COIT OBSERVATORY, BOSTON UNIVERSITY

- Duties: maintain and service telescopes, assist at open houses, maintain lab equipment

Boston, Massachusetts

Jun 2010 - May 2013

Refereed Publications (*h*-index: 15)

- [1] Daniel R. Rybczak, Trey V. **Wenger**, and Snežana Stanimirović. Revisiting the Vertical Distribution of H I Absorbing Clouds in the Solar Neighborhood. II. Constraints from a Large Catalog of 21 cm Absorption Observations at High Galactic Latitudes. *Astrophysical Journal*, 975(2):167, November 2024.
- [2] T. M. Bania, Dana S. Balser, Trey V. **Wenger**, Spencer J. Ireland, L. D. Anderson, and Matteo Luisi. The Most Sensitive Radio Recombination Line Measurements Ever Made of the Galactic Warm Ionized Medium. *Astrophysical Journal*, 972(2):192, September 2024.
- [3] Trey V. **Wenger**, Daniel R. Rybczak, and Snežana Stanimirović. Revisiting the Vertical Distribution of H I Absorbing Clouds in the Solar Neighborhood. *Astrophysical Journal*, 966(2):206, May 2024.
- [4] L. J. Toomey, G. Hobbs, D. C. Price, J. R. Dawson, T. **Wenger**, D. Lagoy, L. Staveley-Smith, J. A. Green, E. Carretti, A. Hafner, M. Huynh, J. Kaczmarek, S. Mader, V. McIntyre, J. Reynolds, T. Robishaw, J. Sarkissian, A. Thompson, C. Tremblay, and A. Zic. SDHDF: A new file format for spectral-domain radio astronomy data. *Astronomy and Computing*, 47:100804, April 2024.
- [5] Dana S. Balser and Trey V. **Wenger**. The Metallicity–Electron Temperature Relationship in H II Regions. *Astrophysical Journal*, 964(1):47, March 2024.
- [6] Dylan J. Linville, Matteo Luisi, L. D. Anderson, Bin Liu, T. M. Bania, Dana S. Balser, Trey V. **Wenger**, L. M. Haffner, and J. L. Mascoop. The GBT Diffuse Ionized Gas Survey (GDIGS): Discrete Sources. *Astrophysical Journal*, 959(2):110, December 2023.
- [7] L. D. Anderson, B. Liu, Dana. S. Balser, T. M. Bania, L. M. Haffner, Dylan J. Linville, Matteo Luisi, and Trey V. **Wenger**. Methods for Averaging Spectral Line Data. *Publications of the Astronomical Society of the Pacific*, 135(1053):114504, November 2023.
- [8] J. D. Soler, E. Zari, D. Elia, S. Molinari, C. Mininni, E. Schisano, A. Traficante, R. S. Klessen, S. C. O. Glover, P. Hennebelle, T. Colman, N. Frankel, and T. **Wenger**. A comparison of the Milky Way’s recent star formation revealed by dust thermal emission and high-mass stars. *Astronomy & Astrophysics*, 678:A95, October 2023.

- [9] Dana S. Balser, Trey V. **Wenger**, and T. M. Bania. Do All Low-Mass Stars Undergo Extra Mixing Processes? *Astrophysical Journal*, 936(2):168, September 2022.
- [10] Dana S. Balser, Trey V. **Wenger**, L. D. Anderson, W. P. Armentrout, T. M. Bania, J. R. Dawson, and John M. Dickey. Discovery of a New Population of Galactic HII Regions with Ionized Gas Velocity Gradients. *Astrophysical Journal*, 921(2):176, November 2021.
- [11] L. D. Anderson, Matteo Luisi, Bin Liu, Trey V. **Wenger**, Dana. S. Balser, T. M. Bania, L. M. Haffner, Dylan J. Linville, and J. L. Mascoop. The GBT Diffuse Ionized Gas Survey (GDIGS): Survey Overview and First Data Release. *Astrophysical Journal Supplement Series*, 254(2):28, June 2021.
- [12] Trey V. **Wenger**, J. R. Dawson, John M. Dickey, C. H. Jordan, N. M. McClure-Griffiths, L. D. Anderson, W. P. Armentrout, Dana S. Balser, and T. M. Bania. The Southern HII Region Discovery Survey. II. The Full Catalog. *Astrophysical Journal Supplement Series*, 254(36):36, June 2021.
- [13] J. L. Mascoop, L. D. Anderson, Trey. V. **Wenger**, Z. Makai, W. P. Armentrout, Dana. S. Balser, and T. M. Bania. The Galactic H II Region Luminosity Function at Radio and Infrared Wavelengths. *Astrophysical Journal*, 910(2):159, April 2021.
- [14] W. P. Armentrout, L. D. Anderson, Trey V. **Wenger**, Dana S. Balser, and T. M. Bania. A VLA Census of the Galactic H II Region Population. *Astrophysical Journal Supplement Series*, 253(1):23, March 2021.
- [15] Matteo Luisi, L. D. Anderson, Bin Liu, Dana S. Balser, T. M. Bania, Trey V. **Wenger**, and L. M. Haffner. The GBT Diffuse Ionized Gas Survey: Tracing the Diffuse Ionized Gas around the Giant Hii Region W43. *Astrophysical Journal*, 889(2):96, February 2020.
- [16] Trey V. **Wenger**, Dana S. Balser, L. D. Anderson, and T. M. Bania. Metallicity Structure in the Milky Way Disk Revealed by Galactic H II Regions. *Astrophysical Journal*, 887(2):114, December 2019.
- [17] C. D. Wiens, T. V. **Wenger**, P. Tzanavaris, K. E. Johnson, S. C. Gallagher, and L. Xiao. The Occurrence of Compact Groups of Galaxies through Cosmic Time. *Astrophysical Journal*, 873(2):124, March 2019.
- [18] L. D. Anderson, T. V. **Wenger**, W. P. Armentrout, D. S. Balser, and T. M. Bania. A Galactic Plane Defined by the Milky Way H II Region Distribution. *Astrophysical Journal*, 871:145, February 2019.
- [19] T. V. **Wenger**, J. M. Dickey, C. H. Jordan, D. S. Balser, W. P. Armentrout, L. D. Anderson, T. M. Bania, J. R. Dawson, N. M. McClure-Griffiths, and J. Shea. The Southern H II Region Discovery Survey. I. The Bright Catalog. *Astrophysical Journal Supplement Series*, 240:24, February 2019.
- [20] D. M. Maffucci, T. V. **Wenger**, R. Le Gal, and E. Herbst. Astrochemical Kinetic Grid Models of Groups of Observed Molecular Abundances: Taurus Molecular Cloud 1 (TMC-1). *Astrophysical Journal*, 868:41, November 2018.
- [21] M. Luisi, L. D. Anderson, T. M. Bania, D. S. Balser, T. V. **Wenger**, and A. A. Kepley. Hydrogen Radio Recombination Line Emission from M51 and NGC 628. *Publications of the Astronomical Society of the Pacific*, 130(8):084101, August 2018.
- [22] T. V. **Wenger**, D. S. Balser, L. D. Anderson, and T. M. Bania. Kinematic Distances: A Monte Carlo Method. *Astrophysical Journal*, 856:52, March 2018.
- [23] L. D. Anderson, W. P. Armentrout, M. Luisi, T. M. Bania, D. S. Balser, and T. V. **Wenger**. A Green

Bank Telescope Survey of Large Galactic H II Regions. *Astrophysical Journal Supplement Series*, 234:33, February 2018.

- [24] T. V. **Wenger**, A. A. Khan, N. G. Ferraro, D. S. Balser, W. P. Armentrout, L. D. Anderson, and T. M. Bania. Carbon Monoxide Observations toward Star-forming Regions in the Outer Scutum-Centaurus Spiral Arm. *Astrophysical Journal*, 852:2, January 2018.
- [25] M. Luisi, L. D. Anderson, D. S. Balser, T. V. **Wenger**, and T. M. Bania. Diffuse Ionized Gas in the Milky Way Disk. *Astrophysical Journal*, 849:117, November 2017.
- [26] B.-C. Koo, G. Park, W.-T. Kim, M. G. Lee, D. S. Balser, and T. V. **Wenger**. Tracing the Spiral Structure of the Outer Milky Way with Dense Atomic Hydrogen Gas. *Publications of the Astronomical Society of the Pacific*, 129(9):094102, September 2017.
- [27] D. S. Balser, T. V. **Wenger**, W. M. Goss, K. E. Johnson, and A. A. Kepley. JVLA Observations of IC 342: Probing Star Formation in the Nucleus. *Astrophysical Journal*, 844:73, July 2017.
- [28] C. Brown, C. Jordan, J. M. Dickey, L. D. Anderson, W. P. Armentrout, D. S. Balser, T. M. Bania, J. R. Dawson, N. M. McClure-Griffiths, and T. V. **Wenger**. The Southern H II Region Discovery Survey (SHRDS): Pilot Survey. *Astronomical Journal*, 154:23, July 2017.
- [29] W. P. Armentrout, L. D. Anderson, D. S. Balser, T. M. Bania, T. M. Dame, and T. V. **Wenger**. High-mass Star Formation in the Outer Scutum-Centaurus Arm. *Astrophysical Journal*, 841:121, June 2017.
- [30] M. Luisi, L. D. Anderson, D. S. Balser, T. M. Bania, and T. V. **Wenger**. H II Region Ionization of the Interstellar Medium: A Case Study of NGC 7538. *Astrophysical Journal*, 824:125, June 2016.
- [31] L. D. Anderson, W. P. Armentrout, B. M. Johnstone, T. M. Bania, D. S. Balser, T. V. **Wenger**, and V. Cunningham. Finding Distant Galactic HII Regions. *Astrophysical Journal Supplement Series*, 221:26, December 2015.
- [32] L. D. Anderson, L. A. Hough, T. V. **Wenger**, T. M. Bania, and D. S. Balser. Untangling the Recombination Line Emission from H II Regions with Multiple Velocity Components. *Astrophysical Journal*, 810:42, September 2015.
- [33] D. S. Balser, T. V. **Wenger**, L. D. Anderson, and T. M. Bania. Azimuthal Metallicity Structure in the Milky Way Disk. *Astrophysical Journal*, 806:199, June 2015.
- [34] L. D. Anderson, T. M. Bania, D. S. Balser, V. Cunningham, T. V. **Wenger**, B. M. Johnstone, and W. P. Armentrout. The WISE Catalog of Galactic H II Regions. *Astrophysical Journal Supplement Series*, 212:1, May 2014.
- [35] T. V. **Wenger**, T. M. Bania, D. S. Balser, and L. D. Anderson. The Green Bank Telescope H II Region Discovery Survey. IV. Helium and Carbon Recombination Lines. *Astrophysical Journal*, 764:34, February 2013.

Other Publications

- [1] Alex S. Hill, Jan Cami, Laura Fissel, Tyler Foster, Gilles Joncas, Lewis Knee, Roland Kothes, Tom Landecker, Tim Robishaw, Erik Rosolowsky, Samar Safi-Harb, Jennifer West, and Trey V. **Wenger**. Canadian Investigations of the Interstellar Medium. In *Canadian Long Range Plan for Astronomy and Astrophysics White Papers*, volume 2020, page 44, October 2019.

- [2] L. D. Anderson, W. P. Armentrout, T. M. Bania, D. S. Balser, M. Luisi, T. V. **Wenger**, and D. A. Roshi. HII Regions and the Warm Ionized Medium. *Astro2020: Decadal Survey on Astronomy and Astrophysics, science white papers*, 51(3):137, May 2019.
- [3] D. S. Balser, L. D. Anderson, T. M. Bania, J. M. Dickey, D. Anish Roshi, T. V. **Wenger**, and T. L. Wilson. Science with an ngVLA: Radio Recombination Lines from HII Regions. *Science with a Next-Generation VLA*, October 2018.

Published Software

- [1] Trey **Wenger**. bayes_spec: A Bayesian Spectral Line Modeling Framework for Astrophysics. *The Journal of Open Source Software*, 9(103):7201, November 2024.
- [2] Trey V. **Wenger**. kinematic_scaleheight: Infer the vertical distribution of clouds in the solar neighborhood. Astrophysics Source Code Library, record ascl:2403.003, March 2024.
- [3] Trey V. **Wenger** and Dana S. Balser. HRK: HII Region Kinematics. Astrophysics Source Code Library, August 2021.
- [4] Trey V. **Wenger**. millennium-tap-query: Python tool to query the Millennium Simulation UWS/TAP client. Astrophysics Source Code Library, August 2021.
- [5] T. V. **Wenger**. WISP: Wenger Interferometry Software Package. Astrophysics Source Code Library, December 2018.
- [6] T. **Wenger** and C. Wiens. MillCgs: Searching for Compact Groups in the Millennium Simulation. Astrophysics Source Code Library, November 2018.
- [7] T. V. **Wenger**, D. S. Balser, L. D. Anderson, and T. M. Bania. KDUtils: Kinematic Distance Utilities. Astrophysics Source Code Library, December 2017.
- [8] T. V. **Wenger**, A. K. Kepley, and D. S. Balser. HRM: HII Region Models. Astrophysics Source Code Library, July 2017.
- [9] T. Bania, T. **Wenger**, D. Balser, and L. Anderson. TMBIDL: Single dish radio astronomy data reduction package. Astrophysics Source Code Library, May 2016.

Competitive Observing Proposals (4,125 hours total)

| | | |
|-------------|--|------------|
| 2024 | Co-I: Piloting a MeerKAT UHF-band Recombination Line Survey | MeerKAT |
| | A-rated: 18.8 hours | |
| 2023 – 2024 | Co-I: HII Regions and Galactic Chemical Evolution | ALMA |
| | B-rated: 385.2 hours | |
| 2024 | Co-I: The Warm Ionized Medium of the Galactic Bar | GBT |
| | C-rated: 44 hours | |
| 2024 | Co-I: TORCH: Tracing OH and Recombination lines from molecular Clouds and HII regions | VLA |
| | A-rated: 177 hours | |
| 2024 | Co-I: Ionization State of the Warm Ionized Medium in the Inner Galaxy | GBT + JWST |
| | B-rated: 27 hours (GBT) + 4.87 hours (JWST) | |
| 2024 | PI: Abundances & Ionized Gas Kinematics in Sh2-158 | VLA |

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| | C-rated: 8.5 hours | |
| 2024 | Co-I: Confirmation of Magnetic Field Detection in CRRL Emission from DR 21 | GBT |
| | A-rated: 41 hours | |
| 2023 | PI: HII Regions and Galactic Chemical Evolution | IRAM 30-m |
| | Awarded: 37 hours | |
| 2023 | PI: The Kinematics of Bi-polar HII Regions | ATCA |
| | Rated 4.0/5.0: 273 hours | |
| 2023 | Co-I: Observing 3He+ Emission from the Planetary Nebula IC418 | GBT |
| | B-rated: 8 hours | |
| 2022 | Co-I: Probing the Warm Ionized Medium toward the Outer Galaxy | GBT |
| | Large Filler Project: 81 hours | |
| 2022 | Co-I: GBT Diffuse Ionized Gas Survey at Low frequencies - GDIGS-Low | GBT |
| | Large Filler Project: 826 hours | |
| 2021 | PI: The Internal Kinematics of Galactic HII Regions | ATCA |
| | Rated 4.0/5.0: 165 hours | |
| 2021 | Co-I: Probing Molecular Cloud-HII Region Dynamics using the OH Satellite Line Flip | VLA |
| | A-rated: 42.3 hours | |
| 2021 | Co-I: The 3He Abundance in Planetary Nebulae | VLA |
| | B-rated: 29 hours | |
| 2020 | PI: Resolving the Distance Ambiguity for SHRDS HII Regions | ATCA |
| | Rated 4.0/5.0: 180 hours | |
| 2019 | PI: Resolving the Distance Ambiguity for SHRDS HII Regions (Pilot) | ATCA |
| | Rated 4.2/5.0: 12 hours | |
| 2018 | Co-I: Galactic Chemical Structure in the Southern Sky: A Pilot Project | ALMA |
| | C-rated: 0.7 hour | |
| 2017 | Co-I: The GBT Diffuse Ionized Gas Survey (GDIGS) | GBT |
| | Large Filler Project: 368 hours | |
| 2017 | PI: Molecular Clouds in the Outer Scutum-Centaurus Arm | ARO 12-m |
| | Awarded 40 hours | |
| 2016 | PI: Molecular Clouds in the Outer Scutum-Centaurus Arm | ARO 12-m |
| | Awarded 47 hours | |
| 2016 | Co-I: Star Formation, Ionized Gas, and the Milky Way Bar | GBT |
| | C-rated: 30 hours | |
| 2015 | Co-I: The Southern HII Region Discovery Survey | ATCA |
| | Rated 3.7/5.0, 4.0/5.0, and 4.1/5.0: 900 hours | |
| 2015 | Co-I: NH3 Observations of Outer Scutum Centaurus Sources : Round Two | GBT |
| | A-rated: 10 hours | |
| 2015 | Co-I: Star Formation, Ionized Gas, and the Milky Way Bar | GBT |
| | C-rated: 25 hours | |
| 2015 | Co-I: Is the Milky Way a Grand Design Spiral? | JVLA |

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| | A-rated: 5.5 hours, C-rated: 16.5 hours | |
| 2015 | PI: Metallicity Structure in the Milky Way Disk | <i>JVLA</i> |
| | A-rated: 30 hours | |
| 2014 | Co-I: The Lost Diffuse HII Regions | <i>GBT</i> |
| | A-rated: 53 hours | |
| 2014 | Co-I: Star Formation, Ionized Gas, and the Milky Way Bar | <i>GBT</i> |
| | C-rated: 25 hours | |
| 2014 | Co-I: Finding the Most Distant Galactic Star Formation Regions | <i>JVLA</i> |
| | B-rated: 42 hours | |
| 2013 | Co-I: The WISE Extension of the HRDS | <i>GBT</i> |
| | A-rated: 50 hours | |
| 2013 | Co-I: The Lost Diffuse HII Regions | <i>GBT</i> |
| | A-rated: 53 hours | |
| 2013 | Co-I: Transgalactic Abundances in the Milky Way Disk | <i>JVLA</i> |
| | B-rated: 5 hours | |
| 2013 | Co-I: How Many Ultra-Compact HII Regions Are There in the Milky Way? | <i>JVLA</i> |
| | C-rated: 20 hours | |
| 2012 | Co-I: A WISE Extension of the HRDS? | <i>GBT</i> |
| | B-rated: 50 hours | |

Skills

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| Languages | English (Native), French (Intermediate), Spanish (Beginner) |
| Programming | Python, C/C++, Java, IDL |
| Scripting | BASH, TCSH |
| Web | HTML5, PHP, CSS, Javascript/JQuery |
| Software | L <small>A</small> T <small>E</small> X, CASA, PyMC, high-performance/throughput computing (SLURM, condor) |
| Operating Systems | Linux (Ubuntu, RedHat, CentOS), Mac, Windows |
| Telescopes | Green Bank Telescope (GBT), Jansky Very Large Array (VLA), Arizona Radio Observatory (ARO) 12-m, Australia Telescope Compact Array (ATCA), Atacama Large Millimeter/sub-millimeter Array (ALMA), IRAM 30-m, James Webb Space Telescope (JWST) |

Funding

| | | |
|--------------|---|----------------------------|
| 2022–Present | NSF Astronomy & Astrophysics Postdoctoral Fellowship | <i>Madison, WI</i> |
| | University of Wisconsin-Madison (\$320,000) | |
| 2023–2024 | NSF Grant Co-I: 22nd Annual Symposium of the NSF Astronomy and Astrophysics Postdoctoral Fellows | <i>Boulder, CO</i> |
| | University of Colorado (\$49,937) | |
| 2021 | Neighbourhood Small Grant | <i>Penticton, BC</i> |
| | Sidewalk Astronomy in the City of Penticton | |
| 2019–2022 | Covington Postdoctoral Fellowship | <i>Penticton, BC</i> |
| | Dominion Radio Astrophysical Observatory | |
| 2017–2018 | Graduate Research Fellowship | <i>Charlottesville, VA</i> |
| | Virginia Space Grant Consortium | |

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| 2016–2018 | Grote Reber Doctoral Fellowship | <i>Charlottesville, VA</i> |
| | National Radio Astronomy Observatory | |
| 2016 | Raven Fellowship | <i>Charlottesville, VA</i> |
| | Raven Society, a prestigious UVA honor society | |
| 2016–2017 | Graduate Research Fellowship | <i>Charlottesville, VA</i> |
| | Virginia Space Grant Consortium | |
| 2016–2017 | ARCS Scholarship | <i>Washington, D.C.</i> |
| | Achievement Rewards for College Scientists Foundation | |
| 2013–2019 | D.N. Batten Foundation Jefferson Fellowship | <i>Charlottesville, VA</i> |
| | Jefferson Scholars Foundation | |
| 2012–2013 | Undergraduate Research Outreach Program Award | <i>Boston, MA</i> |
| | Boston University | |
| 2012 | NSF Research Experiences for Undergraduates | <i>Charlottesville, VA</i> |
| | National Radio Astronomy Observatory | |
| 2011 | NSF Research Experiences for Undergraduates | <i>Puerto Rico</i> |
| | Arecibo Observatory | |

Honors & Awards

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| 2019 | Raven Award | <i>Charlottesville, VA</i> |
| | Highest honor awarded by the Raven Society, a prestigious UVA honor society | |
| 2018 | Chambliss Astronomy Achievement Award | <i>Washington, D.C.</i> |
| | 231st American Astronomical Society Meeting | |
| 2016 | Laurence W. Fredrick Teaching Award | <i>Charlottesville, VA</i> |
| | University of Virginia | |
| 2015 | First Place Award and Scholarship | <i>Charlottesville, VA</i> |
| | Huskey Research Exhibition | |
| 2015 | Inductee | <i>Charlottesville, VA</i> |
| | Raven Society, a prestigious UVA honor society | |
| 2014 | Second Place Award and Scholarship | <i>Charlottesville, VA</i> |
| | Huskey Research Exhibition | |
| 2013 | College Prize in Astronomy | <i>Boston, MA</i> |
| | Boston University | |
| 2013 | Institute for Astrophysical Research Prize | <i>Boston, MA</i> |
| | Boston University | |
| 2009–2013 | Dean's List | <i>Boston, MA</i> |
| | Boston University | |

Professional Society Membership

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| Since 2022 | Junior Member | |
| | International Astronomical Union | |
| 2018–2019 | Junior Member | <i>Charlottesville, VA</i> |
| | UVA Society of Fellows, philanthropic organization | |
| 2017–2018 | President | <i>Charlottesville, VA</i> |
| | Raven Society, prestigious UVA honor society | |

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| Since 2015 | Member Raven Society, prestigious UVA honor society | Charlottesville, VA |
| Since 2013 | Member Phi Beta Kappa | Boston, MA |
| Since 2011 | Member American Astronomical Society | USA |
| 2010–2012 | President Boston University Astronomical Society | Boston, MA |
| 2009–2013 | Member Boston University Astronomical Society | Boston, MA |

Teaching Experience

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| 2023–2024 | Guest Lecturer ASTRON 150 (Topics in Astronomy), ASTRON 200 (The Physical Universe) | UW-Madison |
| 2023–2024 | Delta Program in Research, Teaching, and Learning Courses include: <i>Research Mentor Training, Developing a Teaching Plan, and Effective Teaching in an Internationally Diverse Classroom</i> | UW-Madison |
| 2016 | Teaching Assistant Introduction to Cosmology (Undergraduate) | UVA |
| 2016 | Teaching Assistant Research Methods in Astrophysics (Undergraduate) | UVA |
| 2015 | Teaching Assistant Observational Astronomy (Graduate) | UVA |
| 2015 | Teaching Assistant Introduction to Cosmology (Undergraduate) | UVA |
| 2014 | Teaching Assistant Observational Astronomy (Undergraduate) | UVA |
| 2014 | Instructor Stars, Galaxies, and the Universe (Undergraduate) | UVA |

Research Mentoring Experience

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|--------------|---|----------------------|
| 2022–present | Master's/PhD Student: Beth Cappellazzo Co-advised with Jo Dawson and Mark Wardle | Macquarie University |
| 2024–present | RADIAL¹ Student: Eliza Canales Project: <i>Characterizing Turbulence in Galactic HII Regions</i> | UW-Madison |
| 2024–present | Undergraduate Student: Jakob Mills Project: <i>Constraining Galactic Structure with Simulation Based Inference</i> | UW-Madison |
| 2024–present | Undergraduate Student: Pranshav Roshi Project: <i>Constraining Galactic Structure with Simulation Based Inference</i> | UW-Madison |

¹<https://public.nrao.edu/odi/radial/>

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| 2024–present | Undergraduate Student: Ryan Bakko | UW-Madison |
| | Project: Bayesian modeling HII region physical properties and distances | |
| 2022 | Co-op Student: Catie Terrey | U. Waterloo (virtual) |
| | Projects: A Machine Learning Tool to Constraining Galactic Structure and Ionized Gas Velocity Gradients in Galactic HII Regions | |
| 2021 | Independent Study: Aydan McKay | U. Victoria (virtual) |
| | Project: Machine Learning Identification of Galactic HII Regions | |
| 2021 | Co-op Student: Isaac Cheng | DRAO (virtual) |
| | Project: Kinematic Distances: Toward an Improved Galactic Rotation Model | |
| 2020 | Co-op Student: Aydan McKay | DRAO |
| | Project: Galactic Metallicity Structure Revealed by the SHRDS | |
| 2018 | NAC² Student: Maryam Hami | NRAO |
| | Project: Is the Milky Way a Grand Design Spiral? | |
| 2017 | NAC Student: Wesley Red | NRAO |
| | Project: Probing the Galactic Structure of the Milky Way with HII Regions | |
| 2016 | NAC Student: Jeanine Shea | NRAO |
| | Project: Southern H+ Region Discovery Survey | |
| 2015–2018 | Undergraduate Student: Nicholas Ferraro | UVA |
| | Thesis: Investigating the Edge of High Mass Star Formation in the Milky Way Galaxy | |
| 2015–2018 | Undergraduate Student: Asad Khan | UVA |
| | Thesis: Investigating Molecular Cloud Physical Properties in the Milky Way Galaxy | |
| 2015 | NAC Student: Jonathan Barnes | NRAO |
| | Project: Probing Metallicity Structure across the Milky Way Disk with the VLA | |

Outreach & Service

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|--------------|---|-----------------|
| 2024–Present | Referee | |
| | Publications of the Astronomical Society of Australia | |
| 2024–present | Postdoc Representative | Madison, WI |
| | UW-Madison Campus Diversity & Climate Committee | |
| 2023–2024 | Co-organizer | New Orleans, LA |
| | 2024 NSF Astronomy & Astrophysics Fellows Symposium | |
| 2023–Present | Co-chair | Madison, WI |
| | UWPA Diversity, Equity, Inclusion & Belonging Committee | |
| 2022–2024 | Proposal Reviewer | |
| | Australia Telescope National Facility | |
| 2021–2022 | Founder | Penticton, BC |
| | Okanagan Sidewalk Astronomy | |
| 2021–2022 | Founder & Member | Penticton, BC |

²<https://public.nrao.edu/odi/nac/>

DRAO Education & Outreach Committee

2021–Present **Referee**

AAS Journals

2021–Present **Referee**

Astronomy & Astrophysics

2021 **Panelist**

NSF Astronomy & Astrophysics Review Panel

2021–2022 **Panelist**

NRAO Science Review Panel

2019–Present **Referee**

Monthly Notices of the Royal Astronomical Society

2018–2019 **Founder, Organizer**

Astronomy on Tap Charlottesville

2018 **Organizer**

Bob Rood Memorial Research Symposium

2017–2018 **President**

Raven Society

2017 **Chair**

Gray-Carrington Memorial Fellowship Committee

2017 **Member**

UVA Astronomy Graduate Admissions Committee

2017 **Organizer**

Bob Rood Memorial Research Symposium

2016–2019 **Member**

Raven Society Leadership Council

2016 **Volunteer Speaker**

Charlottesville Astronomical Society

2015 **Organizer**

Forum for Interdisciplinary Dialogue Research Symposium

2013–2019 **Co-founder**

Astronomy Undergraduate Mentorship Program

2013–2019 **Volunteer Webmaster**

UVA Astronomy Department

2013–2019 **Volunteer**

Dark Skies, Bright Kids, community outreach program

2013–2019 **Volunteer and Speaker**

Charlottesville-area observatory open houses

2010–2012 **President**

Boston University Astronomical Society

2009–2013 **Member**

Boston University Astronomical Society

Charlottesville, VA

Boston, MA

Boston, MA

Invited Talks

- Aug. 2024 **Invited Talk:** *Cool Diffuse Ionized Gas Revealed by Sensitive Radio Recombination Line Observations*
Green Bank Observatory

(Virtual)

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| May 2024 | Invited Talk: <i>Spectral Line Multi-frequency Synthesis: Application to Radio Recombination Line Science</i> Spatio-spectral Modeling of Interferometric Data | Charlottesville, VA |
| Apr. 2024 | Colloquium: <i>Galactic HII Regions and Structure in the Milky Way</i> Hofstra University | Hempstead, NY |
| Oct. 2023 | Invited Talk: <i>Galactic HII Regions and Structure in the Milky Way</i> Surveying the Milky Way | Pasadena, CA |
| Oct. 2023 | Invited Talk: <i>Galactic HII Regions and Structure in the Milky Way</i> IRAM/UW Seminar Series | (Virtual) |
| July 2023 | Invited Talk: <i>Galactic HII Regions and Structure in the Milky Way</i> Interstellar Institute 6 | Paris, FR |
| Mar. 2023 | Colloquium: <i>Galactic HII Regions and Structure in the Milky Way</i> University of Tasmania | Hobart, AUS |
| Mar. 2023 | Colloquium: <i>Galactic HII Regions and Structure in the Milky Way</i> Australian National University | Canberra, AUS |
| Mar. 2023 | Colloquium: <i>Galactic HII Regions and Structure in the Milky Way</i> Macquarie University | Macquarie Park, AUS |
| Mar. 2023 | Colloquium: <i>Galactic HII Regions, Diffuse Ionized Gas, and Structure in the Milky Way</i> Australia Telescope National Facility | Marsfield, AUS |
| Feb. 2023 | Invited Talk: <i>Galactic HII Regions and Structure in the Milky Way</i> Mapping the Milky Way, Lorentz Center @ Oort | Leiden, Netherlands |
| Jan. 2023 | Invited Talk: <i>Modern Methods to Solve Old Problems in Galactic Structure</i> NSF AAPF Symposium | Seattle, WA |
| Sep. 2022 | Colloquium: <i>Galactic HII Regions and Structure in the Milky Way</i> University of Wisconsin–Madison | Madison, WI |
| July 2022 | Colloquium: <i>Galactic HII Regions and Structure in the Milky Way</i> Dominion Astrophysical Observatory | Victoria, BC |
| Feb. 2022 | Invited Talk: <i>The Spiral Structure of the Milky Way</i> Okanagan College | Penticton, BC |
| Feb. 2022 | Colloquium (Virtual): <i>Serendipitous Discoveries with Radio Recombination Lines</i> National Radio Astronomy Observatory | Charlottesville, VA |
| Sep. 2021 | Colloquium (Virtual): <i>Galactic HII Regions and Structure in the Milky Way</i> National Radio Astronomy Observatory | Charlottesville, VA |
| Aug. 2021 | Colloquium (Virtual): <i>Serendipitous Discoveries with Radio Recombination Lines</i> Green Bank Observatory | Green Bank, WV |
| June 2021 | Invited Talk (Virtual): <i>Galactic HII Regions and Structure in the Milky Way</i> Green Bank Observatory Community Zoom | Green Bank, WV |
| Oct. 2020 | Colloquium (Virtual): <i>Revealing Structure in the Milky Way with Galactic HII Regions</i> Boston University | Boston, MA |

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| Aug. 2020 | Colloquium (Virtual): Revealing Structure in the Milky Way with Galactic HII Regions University of British Columbia | Vancouver, BC |
| Mar. 2020 | Invited Talk: The Structure of the Milky Way Royal Astronomical Society of Canada Okanagan Centre General Meeting | Kelowna, BC |
| Oct. 2019 | Colloquium: Structure in the Milky Way Green Bank Observatory | Green Bank, WV |
| Sep. 2019 | Invited Talk: Galactic HII Regions: Morphological and Chemical Structure in the Milky Way The Self-Organized Star Formation Process | Paris, FR |
| Sep. 2018 | SMA Seminar: The Southern HII Region Discovery Survey Center for Astrophysics | Cambridge, MA |
| Apr. 2018 | Research Symposium: The Southern HII Region Discovery Survey: <i>The Bright Catalog</i> Virginia Space Grant Consortium Research Conference | Norfolk, VA |
| Mar. 2018 | Research Symposium: The Southern HII Region Discovery Survey: <i>The Bright Catalog</i> Bob Rood Memorial Symposium | Charlottesville, VA |
| May 2017 | Lunch Talk: Metallicity Structure in the Milky Way Disk University of Tasmania | Hobart, TAS |
| Apr. 2017 | Research Symposium: Metallicity Structure in the Milky Way Disk Virginia Space Grant Consortium Research Conference | Williamsburg, VA |
| Apr. 2017 | Research Symposium: Structure in the Milky Way ARCS Foundation Metro-Washington D.C. Chapter | Charlottesville, VA |
| Mar. 2017 | Research Symposium: Metallicity Structure in the Milky Way Disk Bob Rood Memorial Research Symposium | Charlottesville, VA |
| Nov. 2016 | Lunch Talk: Structure in the Milky Way Boston University | Boston, MA |
| Oct. 2016 | Research Symposium ARCS Metro-Washington D.C. Chapter, National Academy of Sciences | Washington, D.C. |
| Sep. 2016 | Lunch Talk National Radio Astronomy Observatory | Charlottesville, VA |
| Apr. 2016 | Invited Talk: Structure in the Milky Way Charlottesville Astronomical Society | Charlottesville, VA |
| Oct. 2015 | Research Symposium: Structure in the Milky Way Bob Rood Memorial Symposium | Charlottesville, VA |
| Feb. 2015 | Research Symposium: Galactic Cartography: The Local Universe from Ptolemy to the HRDS Jefferson Scholars Foundation | Charlottesville, VA |

Professional References

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|-----------------------------------|--|
| Dr. Dana Balser | PhD advisor National Radio Astronomy Observatory +1 (434) 296-0242 dbalser@nrao.edu |
| Prof. Thomas Bania | Research collaborator Boston University +1 (617) 353-3652 bania@bu.edu |
| Prof. Snežana Stanimirović | Postdoc mentor & research collaborator University of Wisconsin–Madison +1 (608) 890-1458 sstanimi@astro.wisc.edu |

Conference Proceedings

- [1] Daniel Rybczkyk, Trey **Wenger**, and Snezana Stanimirovic. A revised estimate of the thickness of the CNM in the solar neighborhood. In *IAU General Assembly*, page 2649, August 2024.
- [2] Pedro Salas, Kimberly Emig, Dylan Linville, Poojapriyatharsheni Jeyasingh, Anish Roshi, Loren Anderson, Allison Smith, Matteo Luisi, Trey **Wenger**, Leonardo Supan, and Gabriela Castelletti. Characterizing the atomic-to-molecular transition with carbon radio recombination lines. In *IAU General Assembly*, page 3032, August 2024.
- [3] Loren Anderson, Trey **Wenger**, Dana Balser, Thomas Bania, Matteo Luisi, and Dylan Linville. The Hardness of the Radiation in the Warm Ionized Medium. In *American Astronomical Society Meeting Abstracts*, volume 244 of *American Astronomical Society Meeting Abstracts*, page 211.04, June 2024.
- [4] Robert Benjamin, Cameren Swiggum, Trey **Wenger**, Dhanesh Krishnarao, Catherine Zucker, and Michael Kuhn. Passage Through the Carina Spiral Arm as the Origin of Major Star Forming Complexes in the Solar Neighborhood. In *American Astronomical Society Meeting Abstracts*, volume 244 of *American Astronomical Society Meeting Abstracts*, page 321.05, June 2024.
- [5] Matteo Luisi, Dylan Linville, Loren Anderson, Bin Liu, Thomas Bania, Dana Balser, Trey **Wenger**, L. Haffner, and Joshua Mascoop. The GBT Diffuse Ionized Gas Survey (GDIGS): Discrete Sources. In *American Astronomical Society Meeting Abstracts*, volume 244 of *American Astronomical Society Meeting Abstracts*, page 211.05, June 2024.
- [6] Daniel Rybczkyk, Trey Wenger, and Snezana Stanimirovic. An updated estimate of the CNM thickness in the solar neighborhood. In *American Astronomical Society Meeting Abstracts*, volume 244 of *American Astronomical Society Meeting Abstracts*, page 120.03, June 2024.
- [7] Trey **Wenger**, Thomas Bania, Dana Balser, Spencer Ireland, Loren Anderson, and Matteo Luisi. Cool Diffuse Ionized Gas Revealed by Sensitive Radio Recombination Line Observations. In *American Astronomical Society Meeting Abstracts*, volume 244 of *American Astronomical Society Meeting Abstracts*, page 211.03, June 2024.
- [8] Trey Wenger and John Dickey. Resolving the Kinematic Distance Ambiguity of Galactic HII Regions with Machine Learning. In *American Astronomical Society Meeting Abstracts*, volume 244 of *American Astronomical Society Meeting Abstracts*, page 115.03, June 2024.

- [9] William Armentrout, Loren Anderson, Thomas Bania, Dana Balser, and Trey **Wenger**. Star Formation on the Outer Edge of the Milky Way. In *American Astronomical Society Meeting Abstracts*, volume 55 of *American Astronomical Society Meeting Abstracts*, page 202.08, September 2023.
- [10] Matteo Luisi, Dylan Linville, Loren Anderson, Bin Liu, Thomas Bania, Dana Balser, Trey **Wenger**, L. Haffner, and Joshua Mascoop. The GBT Diffuse Ionized Gas Survey (GDIGS): Discrete Sources. In *American Astronomical Society Meeting Abstracts*, volume 55 of *American Astronomical Society Meeting Abstracts*, page 235.07, January 2023.
- [11] Trey **Wenger** and Catie Terrey. Milky Way Structure Revealed by Galactic HII Regions. In *American Astronomical Society Meeting Abstracts*, volume 55 of *American Astronomical Society Meeting Abstracts*, page 340.06, January 2023.
- [12] Dustin Lagoy, Michael A. Smith, Stephen T. Harrison, David A. Del Rizzo, Timothy Robishaw, Trey V. **Wenger**, and Anna Ordog. High-volume spectral data processing pipeline at the Dominion Radio Astrophysical Observatory. In *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 12189 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, page 121890Q, August 2022.
- [13] Matteo Luisi, Loren Anderson, Bin Liu, Dana Balser, Thomas Bania, Trey **Wenger**, and L. Haffner. Can Formaldehyde Absorption Measurements Resolve the Kinematic Distance Ambiguity? In *American Astronomical Society Meeting Abstracts*, volume 54 of *American Astronomical Society Meeting Abstracts*, page 333.07, June 2022.
- [14] T. V. **Wenger**. Galactic HII Regions and Chemical Structure in the Milky Way. In *The Past, Present, and Future of the VLA: Celebrating 40 Years*, August 2021.
- [15] A. Johnson, W. Armentrout, L. Anderson, T. Bania, D. Balser, and T. **Wenger**. Detecting HII Regions in the Outer Scutum-Centaurus Arm. In *American Astronomical Society Meeting Abstracts*, volume 53 of *American Astronomical Society Meeting Abstracts*, page 153.10, January 2021.
- [16] W. Armentrout, L. Anderson, D. Frayer, D. Balser, T. Bania, T. Dame, and T. **Wenger**. High-Mass Star Formation in the Far Outer Galaxy. In *American Astronomical Society Meeting Abstracts* #236, volume 236 of *American Astronomical Society Meeting Abstracts*, page 209.06, June 2020.
- [17] M. Luisi, L. D. Anderson, B. Liu, D. S. Balser, T. M. Bania, T. V. **Wenger**, and L. Haffner. The Impact of HII Regions on the Interstellar Medium of our Galaxy. In *American Astronomical Society Meeting Abstracts* #236, volume 236 of *American Astronomical Society Meeting Abstracts*, page 209.04, June 2020.
- [18] J. Mascoop, L. Anderson, Z. Makai, W. Armentrout, D. Balser, T. **Wenger**, and T. Bania. The Galactic HII Region Luminosity Function at Radio and Infrared Wavelengths. In *American Astronomical Society Meeting Abstracts* #236, volume 236 of *American Astronomical Society Meeting Abstracts*, page 333.03, June 2020.
- [19] W. Armentrout, L. Anderson, T. **Wenger**, D. Balser, and T. Bania. A VLA Census of the Galactic HII Region Population. In *American Astronomical Society Meeting Abstracts* #235, volume 235 of *American Astronomical Society Meeting Abstracts*, page 236.03, January 2020.
- [20] M. Prial, K. Johnson, X. Cheng, E. Cohen, K. A. Corcoran, S. El-Abd, M. Finn, S. Gustitus, D. Hancock, C. R. Hayes, X. Huang, N. James, H. Lewis, M. Liu, A. M. Matthews, R. Mazzei, A. McAlister, B. C.

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- [21] M. Rao, T. V. **Wenger**, D. S. Balser, L. D. Anderson, W. P. Armentrout, T. M. Bania, N. Budaiev, L. M. Haffner, B. Liu, and M. Luisi. The Green Bank Telescope Diffuse Ionized Gas Survey (GDIGS). In *American Astronomical Society Meeting Abstracts #235*, volume 235 of *American Astronomical Society Meeting Abstracts*, page 306.03, January 2020.
- [22] T. **Wenger**, D. S. Balser, L. D. Anderson, and T. M. Bania. Azimuthal Metallicity Structure in the Milky Way Disk Revealed by Galactic HII Regions. In *American Astronomical Society Meeting Abstracts #235*, volume 235 of *American Astronomical Society Meeting Abstracts*, page 309.03, January 2020.
- [23] M. Hami, D. Balser, T. V. **Wenger**, and L. Bania, T. Anderson. Is The Milky Way A Grand Design Spiral? In *American Astronomical Society Meeting Abstracts #233*, volume 233 of *American Astronomical Society Meeting Abstracts*, page 252.12, January 2019.
- [24] M. Luisi, T. Bania, L. Anderson, B. Liu, D. Balser, L. M. Haffner, and T. V. **Wenger**. The W43 Complex in Radio Recombination Line Emission - First Results from GDIGS. In *American Astronomical Society Meeting Abstracts #233*, volume 233 of *American Astronomical Society Meeting Abstracts*, page 232.05, January 2019.
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- [27] D. S. Balser, T. V. **Wenger**, T. M. Bania, and L. D. Anderson. Metallicity Structure across the Galactic Disk: Radio Observations of H ii Regions. In C. Chiappini, I. Minchev, E. Starkenburg, and M. Valentini, editors, *Rediscovering Our Galaxy*, volume 334 of *IAU Symposium*, pages 275–276, August 2018.
- [28] T. V. **Wenger**, D. S. Balser, L. D. Anderson, and T. M. Bania. Structure in the Milky Way. In C. Chiappini, I. Minchev, E. Starkenburg, and M. Valentini, editors, *Rediscovering Our Galaxy*, volume 334 of *IAU Symposium*, pages 381–382, August 2018.
- [29] W. P. Armentrout, L. Anderson, T. V. **Wenger**, D. Balser, and T. Bania. A Complete VLA Census of the ~7000 Milky Way HII Regions. In *American Astronomical Society Meeting Abstracts #231*, volume 231 of *American Astronomical Society Meeting Abstracts*, page 445.04, January 2018.
- [30] A. M. Burkhardt, A. M. Matthews, K. E. Johnson, I. Avilez, L. Beale, L. E. Bittle, D. Bordenave, M. Finn, A. Firebaugh, D. Hancock, P. Hughes, C. Rochford Hayes, H. Lewis, S. Linden, S. Liss, M. Liu, S. McNair, E. Murphy, B. Prager, M. Pryal, W. Richardson, Y. Song, N. Troup, J. Villadsen,

- T. V. **Wenger**, and R. F. Wilson. Dark Skies, Bright Kids Year 9. In *American Astronomical Society Meeting Abstracts #231*, volume 231 of *American Astronomical Society Meeting Abstracts*, page 360.01, January 2018.
- [31] N. Ferraro, T. V. **Wenger**, A. Khan, D. Balser, W. P. Armentrout, L. D. Anderson, and T. Bania. Carbon Monoxide Observations Toward Star Forming Regions in the Outer Scutum-CentaurusSpiral Arm. In *American Astronomical Society Meeting Abstracts #231*, volume 231 of *American Astronomical Society Meeting Abstracts*, page 247.18, January 2018.
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- [39] T. **Wenger**, D. S. Balser, L. D. Anderson, and T. M. Bania. Metallicity Structure in the Milky Way Disk. In *American Astronomical Society Meeting Abstracts*, volume 229 of *American Astronomical Society Meeting Abstracts*, page 340.07, January 2017.
- [40] T. V. **Wenger**, C. D. Wiens, K. E. Johnson, S. C. Gallagher, and P. Tzanavaris. The Importance of Compact Group Environments over Cosmic Time. In *Mapping the Pathways of Galaxy Transformation Across Time and Space*, August 2016.
- [41] T. V. **Wenger**, J. M. Dickey, C. Jordan, T. M. Bania, D. S. Balser, J. Dawson, L. D. Anderson, W. P. Armentrout, N. McClure-Griffiths, and C. Brown. The Southern HII Region Discovery Survey. In

Star Formation, Magnetic Fields, and Diffuse Matter in the Galaxy: a Conference Honoring Richard Crutcher and Carl Heiles, May 2016.

- [42] W. P. Armentrout, L. D. Anderson, D. S. Balser, T. M. Bania, T. M. Dame, and T. **Wenger**. High-Mass Star Formation in the Outer Scutum-Centaurus Arm. In *American Astronomical Society Meeting Abstracts*, volume 227 of *American Astronomical Society Meeting Abstracts*, page 409.07, January 2016.
- [43] J. Barnes, D. S. Balser, and T. **Wenger**. Probing Metallicity across the Milky Way Disk with the VLA. In *American Astronomical Society Meeting Abstracts*, volume 227 of *American Astronomical Society Meeting Abstracts*, page 341.14, January 2016.
- [44] L. E. Bittle, K. E. Johnson, H. J. Borish, A. Burkhardt, A. Firebaugh, D. Hancock, C. Rochford Hayes, S. Linden, S. Liss, A. Matthews, B. Prager, M. Pryal, K. R. Sokal, N. W. Troup, and T. **Wenger**. Dark Skies, Bright Kids Year 7. In *American Astronomical Society Meeting Abstracts*, volume 227 of *American Astronomical Society Meeting Abstracts*, page 248.07, January 2016.
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- [54] Loren D. Anderson, Dana S. Balser, Thomas M. Bania, and Trey **Wenger**. A WISE Extension of the GBT HRDS. In *American Astronomical Society Meeting Abstracts 221*, page 413.01, January 2013.
- [55] Dana S. Balser, Loren D. Anderson, Thomas M. Bania, and Trey **Wenger**. Probing Metallicity Across the Galactic Disk with the GBT. In *American Astronomical Society Meeting Abstracts 221*, page 413.03, January 2013.
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