

Curriculum Vitae of
Patrick D. Sheehan
National Radio Astronomy Observatory
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EMPLOYMENT

Associate Scientist National Radio Astronomy Observatory (NRAO)	2026 - present
Assistant Scientist National Radio Astronomy Observatory (NRAO)	2022 - 2026
NSF Astronomy & Astrophysics Postdoctoral Fellow Center for Interdisciplinary Exploration and Research in Astronomy (CIERA) Northwestern University	2020 - 2022
CIERA Postdoctoral Fellow Center for Interdisciplinary Exploration and Research in Astronomy (CIERA) Northwestern University	2019 - 2020
Postdoctoral Scholar National Radio Astronomy Observatory, Charlottesville (2018 - 2019) Department of Physics and Astronomy, University of Oklahoma (2017 - 2018) Supervisor: John J. Tobin	2017 - 2019
Research Assistant NSF Graduate Research Fellow (2012 - 2015) Department of Astronomy, University of Arizona Advisor: Josh A. Eisner	2011 - 2017

EDUCATION

University of Arizona , Tucson, Arizona Ph.D., Astronomy and Astrophysics <i>"Signposts of Planet Formation in the Early Stages of Star Formation"</i> M.S., Astronomy and Astrophysics Advisor: Josh A. Eisner	2017
University of Rochester , Rochester, New York B.S., Physics and Astronomy B.A., Mathematics Graduated <i>Summa Cum Laude</i> and with Highest Distinction	2011

HONORS & AWARDS

NSF Astronomy & Astrophysics Postdoctoral Fellowship , National Science Foundation	2020 - 2023
ALMA Ambassador , North American ALMA Science Center	2018

Service Award , Department of Astronomy, University of Arizona	2015
NSF Graduate Research Fellowship , National Science Foundation	2012 - 2015
Stoddard Senior Thesis Prize , Department of Physics & Astronomy, University of Rochester	2011
Fulbright Prize , Department of Physics & Astronomy, University of Rochester	2011
Phi Beta Kappa , Iota Chapter of New York	2011
Goldwater Scholarship , Barry M. Goldwater Scholarship and Excellence in Education Foundation	2009

PRINCIPAL INVESTIGATOR GRANTS

Summary: \$468,026 total funding across 5 PI/CoPI grants

National Science Foundation NSF Standard Grants - \$38,266 <i>“20th Annual Symposium of the NSF Astronomy and Astrophysics Postdoctoral Fellows”</i> CoPI with Sarah Wellons, Joel Zinn, Claude-Andre Faucher-Gigere	2021 - 2022
National Science Foundation NSF Astronomy & Astrophysics Research Grants - \$109,760 <i>“Collaborative Research: Early Planet Formation in Embedded Disks”</i>	2021 - 2026
National Science Foundation NSF Astronomy & Astrophysics Postdoctoral Fellowship - \$300,000 <i>“Demographics of the Youngest Protostars and their Disks”</i>	2020 - 2023
National Radio Astronomy Observatory (Science PI) Student Observing Support, for Ms. Elizabeth Teng - \$10,000 <i>“Surrogate Modeling of Protoplanetary Disk Radiative Transfer Models”</i>	2019 - 2020
National Radio Astronomy Observatory ALMA Ambassador Grant - \$10,000	2018

PRINCIPAL INVESTIGATOR OBSERVING/COMPUTING PROPOSALS

Summary: 25 accepted PI proposals, 388 total hours of time, 5.4 million core-hours computing time

Atacama Large Millimeter Array

- *“A Complete Survey of Protostellar Disk Gas and Dust Structure in Taurus”*
Cycle 7 (20.9 hours - 12m Array; 41.3 hours Morita Array)
- *“Direct Mass Measurements of Pre-Main Sequence Stars in Upper Sco”*
Cycle 7 (16.3 hours)
- *“What is Carving the Gaps in Young, Embedded Disks?”*
Cycle 7 (13.5 hours), Cycle 8 (15.2 hours)
- *“An ALMA/JCMT Study of the Time-Variable Class 0 Protostar HOPS 358 and Its (Warped?) Protostellar Disk”*
Cycle 7 (2.5 hours), Cycle 8 (1.9 hours)
- *“Disk Masses and Dust Grain Growth in Class I Protostars in Ophiuchus”*
Cycle 3 (3.2 hours), Cycle 4 (1.2 hours)

- “Resolving Structure in the Planet Forming Regions of the Compact Binary Protostar GV Tau”
Cycle 4 (1.7 hours)

Karl G. Jansky Very Large Array

- “Are Embedded Disks with Substructures Hiding Young Binaries?”
2020B (29.5 hours)
- “eDisk: Early Planet Formation in Embedded Disks - A Long Wavelength Perspective”
2020B (Co-PI; 32 hours), 2024B (PI; 14.3 hours)
- “Constraints on Embedded Disk Structures and Masses”
2018B (9 hours), 2019A (18 hours)
- “Characterizing the Radio Variability of Protoplanetary Disks in the ONC”
2016B (20 hours)

Combined Array for Research in Millimeter-wave Astronomy

- “Measuring Envelope and Disk Masses Around Class I Protostars”
2012A (24 hours), 2012B (31.5 hours), 2013A (12 hours), 2014A (16 hours), 2014B (32 hours)

W. M. Keck Observatory

- “First Constraints on Pre-Main Sequence Evolutionary Tracks at < 1 Myr”
2021B (2 half-nights), 2020B (2 half-nights)

MMT Observatory

- “First Constraints on Pre-Main Sequence Evolutionary Tracks at < 1 Myr”
2021B (2 half-nights), 2022A (2 half-nights)

National Science Foundation XSEDE

- “Constraints on the Structure of Embedded Protostellar Disks with Detailed Radiative Transfer Modeling”
2018 Q4 (Bridges - 3.6M SUs; Comet - 1.7M SUs)
Startup Allocation (Bridges - 50k SUs; Comet - 50k SUs; Stampede2 1600 SUs),

LEADERSHIP & PROFESSIONAL SERVICE

SCIENTIFIC COLLABORATIONS

Early Planet Formation In Disks (eDisks Team)	2019 - present
ALMA Large Program: 2019.1.00261.L	
Core Team/Steering Committee member	
Santa Cruz Array of Lenslets for Exoplanet Spectroscopy (SCALES)	2021 - 2023
W. M. Keck Observatory	
Science Team member	

OTHER SERVICE & LEADERSHIP

Member ALMA Measures Data Working Group	2025 - present
Committee Member of CASA Group Lead Hiring Committee	2025
Co-Author of an ARA&A Review on Embedded Disks	2024
Co-Organizer of the NRAO Star Formation Group meeting	2024 - present
Co-Organizer of the NSF Astronomy & Astrophysics Postdoctoral Fellowship	2020 - present

2022 Fellows Symposium

Organizer of the CIERA Star & Planet Formation Journal Club	2020 - present
Member of the CIERA Seminar Committee	2020 - present
Referee for Nature, ApJ, A&A, MNRAS	2018 - present
ALMA Ambassador , North American ALMA Science Center	2018

OPEN SOURCE SOFTWARE DEVELOPMENT

CORE/LEAD* DEVELOPER

*pdspy	A MCMC Tool for Continuum and Spectral Line Radiative Transfer Modeling GitHub: https://github.com/psheehan/pdspy Zenodo: https://doi.org/10.5281/zenodo.2455079
*pinball-rt	Monte Carlo Dust Radiative Transfer at Warp speed GitHub: https://github.com/psheehan/pinball-rt Docs: pinball-rt.readthedocs.io
*TriFT	Fourier Transforms of Triangulated Unstructured Images GitHub: https://github.com/psheehan/TriFT
auto_selfcal	Automated Self-Calibration Tools for ALMA and the VLA GitHub: https://github.com/jjtobin/auto_selfcal Docs: auto-selfcal.readthedocs.io

CONTRIBUTOR

radmc3d	Monte Carlo Dust Radiative Transfer in 3D GitHub Fork: https://github.com/psheehan/radmc3d-2.0 GitHub Main: https://github.com/dullemond/radmc3d-2.0
galario	GPU Accelerated Library for Analysing Radio Interferometer Observations GitHub Fork: https://github.com/psheehan/galario GitHub Main: https://github.com/mtazzari/galario

MENTORING

Noshin Yesmin , UVa Graduate Student Project: “ <i>The Young Embedded disks in Taurus with Interferometers (YETI) Survey</i> ”	2024 - present
Qifeng Cheng , CIERA REU Program Project: “ <i>A VLA Search for Companions in the Cavities of Young Embedded Transition Disks</i> ” Currently: Graduate student, Duke University	2021 - present
Elizabeth Teng , NRAO REU Program and Senior Thesis (with Dr. Ryan Loomis) Project: “ <i>Surrogate Modeling of Protoplanetary Disk SEDs</i> ” Currently: Graduate student, Northwestern University	2019 - 2020

Students Mentored as secondary advisor

Blake Dreschler, UVa Graduate Student
 Shamus Tobin, Queens University Masters Student

2022 - present
 2023 - present

TEACHING/OUTREACH

- Program Director, CIERA High School Summer Research Program** 2019 - 2022
 Center for Interdisciplinary Exploration and Research in Astronomy
- Organized programming for 6-week summer program for high school students to be involved in CIERA research
- Counselor, Astronomy Camp** 2012 - 2018
 Adult, Advanced, Beginner and Girl Scout Leader Educational Camps
- Led Advanced Teen Camp Bok 90" Spectroscopy, leading to astronomical telegrams on the classification of 5 supernovae
 - Advised Camper Aliza Beverage for her IB Extended Essay project
"Hubble's Constant: A Spectrographic Study to Experimentally Determine the Rate of the Expansion of the Universe."
- Teaching Assistant** 2015 - 2016
 University of Arizona, Department of Astronomy
 Astronomy 170B1: The Physical Universe (Fall 2015, Spring 2016)
- Kepler Undergraduate Student Research Project** 2012 - 2014
Project Leader (Fall 2013 - Spring 2014)
Graduate Student Advisor (Fall 2012 - Spring 2013)
 University of Arizona Undergraduate Astronomy Club
 Instructor for Astronomy 492: Directed Research (Fall 2013, Spring 2014)

OBSERVING EXPERIENCE

ALMA Scheduling Blocks
 VLA Scheduling Blocks
 CARMA Scheduling Blocks, on-site operations
 Keck Observatory (NIREX Spectrograph)
 University of Arizona, Kuiper 90" (Bok B&C Spectrograph)
 University of Arizona, Kuiper 61" (Mont4K)
 Apache Point Observatory, 3.5-meter (TripleSpec)

PUBLICATIONS

Summary: 11 first authored papers; 9 second authored; 67 total; 2 white papers (1 first authored)

SIGNIFICANT CONTRIBUTIONS (*FIRST AUTHORED, †NON-REFEREED)

- 2025 *Dynamical Masses for 23 Pre-Main Sequence Stars in Upper Scorpius: A Critical Test of Stellar Evolutionary Models*
 Towner, A. P. M., J. A. Eisner, **P. D. Sheehan**, L. A. Hillenbrand, and Y.-L. Wu,
 arXiv, arXiv:2509.23001
- 2025 *On the protostellar mass–luminosity relation*
 Hartmann, L., J. J. Tobin, **P. Sheehan**, M. Kounkel, and C. Zhao, MNRAS, 541, 4025

- 2025 **Submillimeter Variability in the Envelope and Warped Protostellar Disk of the Class 0 Protostar HOPS 358*
Sheehan, P. D., D. Johnstone, C. Contreras Peña, S. Lee, G. Herczeg, J.-E. Lee, S. Mairs, J. J. Tobin, H.-S. Yun, and The JCMT Transient Team, ApJ, 982, 176
- 2024 *An Observational View of Structure in Protostellar Systems*
Tobin, J. J. and **P. D. Sheehan**, ARA&A, 62, 203
- 2024 *Constraining the stellar masses and origin of the protostellar VLA 1623 system*
Sadavoy, S. I., **P. Sheehan**, J. J. Tobin, N. M. Murillo, R. Teague, I. W. Stephens, T. Henning, P. C. Myers, and E. A. Bergin, A&A, 687, A308
- 2023 *Finding Substructures in Protostellar Disks in Ophiuchus*
Michel, A., S. I. Sadavoy, **P. D. Sheehan**, L. W. Looney, E. G. Cox, J. J. Tobin, N. van der Marel, and D. M. Segura-Cox, AJ, 166, 184
- 2023 *Early Planet Formation in Embedded Disks (eDisk). I. Overview of the Program and First Results*
Ohashi, N., J. J. Tobin, J. K. Jørgensen, S. Takakuwa, **P. Sheehan**, Y. Aikawa, Z.-Y. Li, L. W. Looney, J. P. Williams, Y. Aso, R. Sharma, J. (Insa C. Sai, Y. Yamato, J.-E. Lee, K. Tomida, H.-W. Yen, F. J. Encalada, C. Flores, S. Gavino, M. Kido, I. Han, Z.-Y. D. Lin, S. Narayanan, N. T. Phuong, A. Santamaría-Miranda, T. J. Thieme, M. L. R. van't Hoff, I. de Gregorio-Monsalvo, P. M. Koch, W. Kwon, S.-P. Lai, C. W. Lee, A. Plunkett, K. Saigo, S. Hirano, K. H. Lam, and S. Mori, ApJ, 951, 8
- 2022 *ALMA Observations of the HD 110058 Debris Disk*
Hales, A. S., S. Marino, **P. D. Sheehan**, S. Ulloa, S. Pérez, L. Matrà, Q. Kral, M. Wyatt, W. Dent, and J. Carpenter, ApJ, 940, 161
- 2022 *A Millimeter-multiwavelength Continuum Study of VLA 1623 West*
Michel, A., S. I. Sadavoy, **P. D. Sheehan**, L. W. Looney, and E. G. Cox, ApJ, 937, 104
- 2022 **A VLA View of the Flared, Asymmetric Disk around the Class 0 Protostar L1527 IRS*
Sheehan, P. D., J. J. Tobin, Z.-Y. Li, M. L. R. van't Hoff, J. K. Jørgensen, W. Kwon, L. W. Looney, N. Ohashi, S. Takakuwa, J. P. Williams, Y. Aso, S. Gavino, I. de Gregorio-Monsalvo, I. Han, C. W. Lee, A. Plunkett, R. Sharma, Y. Aikawa, S.-P. Lai, J.-E. Lee, Z.-Y. D. Lin, K. Saigo, K. Tomida, and H.-W. Yen, ApJ, 934, 95
- 2022 *ALMA Discovery of a Disk around the Planetary-mass Companion SR 12 c*
Wu, Y.-L., B. P. Bowler, **P. D. Sheehan**, L. M. Close, J. A. Eisner, W. M. J. Best, K. Ward-Duong, Z. Zhu, and A. L. Kraus, ApJL, 930, L3
- 2022 **The VLA/ALMA Nascent Disk and Multiplicity (VANDAM) Survey of Orion Protostars VI. Insights from Radiative Transfer Modeling*
P. D. Sheehan, J. J. Tobin, L. W. Looney, S. T. Megeath, ApJ, submitted.
- 2021 *Kinematic Analysis of a Protostellar Multiple System: Measuring the Protostar Masses and Assessing Gravitational Instability in the Disks of L1448 IRS3B and L1448 IRS3A*
Reynolds, N. K., J. J. Tobin, **P. Sheehan**, S. I. Sadavoy, K. M. Kratter, Z.-Y. Li, C. J. Chandler, D. Segura-Cox, L. W. Looney, and M. M. Dunham, ApJL, 907, L10.

- 2020 *The VLA/ALMA Nascent Disk and Multiplicity (VANDAM) Survey of Orion Protostars IV. Unveiling the Embedded Intermediate-Mass Protostar and Disk within OMC2-FIR3/HOPS-370*
J. J. Tobin, **P. D. Sheehan**, N. Reynolds, S. T. Megeath, M. Osorio, G. Anglada, A. K. Diaz-Rodriguez, E. Furlan, K. M. Kratter, S. S. R. Offner, L. W. Looney, M. Kama, Z.-Y. Li, M. L. R. van 't Hoff, S. I. Sadavoy, and N. Karnath, ApJ, 905, 162.
- 2020 *Constraining the Chemical Signatures and the Outburst Mechanism of the Class 0 Protostar HOPS 383*
R. Sharma, J. J. Tobin, **P. D. Sheehan**, S. T. Megeath, W. J. Fischer, J. K. Jorgensen, E. J. Safron, and Z. Nagy, ApJ, 904, 78.
- 2020 **The VLA/ALMA Nascent Disk and Multiplicity (VANDAM) Survey of Orion Protostars. III. Substructures in Protostellar Disks*
P. D. Sheehan, J. J. Tobin, S. Federman, S. T. Megeath, and L. W. Looney, ApJ, 902, 141.
- 2020 **Early onset of planet formation observed in a nascent star system*
P. Sheehan, Nature, Invited News & Views Article, 586, 205.
- 2020 *ALMA Observations of Young Eruptive Stars: Continuum Disk Sizes and Molecular Outflows*
A. S. Hales, S. Pérez, C. Gonzalez-Ruilova, L. A. Cieza, J. P. Williams, **P. D. Sheehan**, C. López, S. Casassus, D. A. Principe, and A. Zurlo, ApJ, 900, 7.
- 2020 *ALMA 0.88 mm Survey of Disks around Planetary-mass Companions*
Y.-L. Wu, B. P. Bowler, **P. D. Sheehan**, S. M. Andrews, G. J. Herczeg, A. L. Kraus, L. Ricci, D. J. Wilner, and Z. Zhu, AJ, 159, 229.
- 2020 *The VLA/ALMA Nascent Disk and Multiplicity (VANDAM) Survey of Orion Protostars. II. A Statistical Characterization of Class 0 and Class I Protostellar Disks*
J. J. Tobin, **P. D. Sheehan**, S. T. Megeath, A. K. Díaz-Rodríguez, S. S. R. Offner, N. M. Murillo, M. L. R. van 't Hoff, E. F. van Dishoeck, M. Osorio, G. Anglada, E. Furlan, A. M. Stutz, N. Reynolds, N. Karnath, W. J. Fischer, M. Persson, L. W. Looney, Z.-Y. Li, I. Stephens, C. J. Chandler, E. Cox, M. M. Dunham, L. Tychoniec, M. Kama, K. Kratter, M. Kounkel, B. Mazur, L. Maud, L. Patel, L. Perez, S. I. Sadavoy, D. Segura-Cox, R. Sharma, B. Stephenson, D. M. Watson, and F. Wyrowski, ApJ, 890, 130.
- 2019 [†]*Astro2020 Science Whitepaper: Protostellar Disks: The Missing Link Between Cores and Planets*
P. D. Sheehan, J. Tobin, I. Stephens, Z. Li, L. Looney, J. A. White, BAAS, 51, 244
- 2019 [†]*Astro2020 Science Whitepaper: Measuring Protostar Masses: The Key to Protostellar Evolution*
J. J. Tobin, S. Offner, **P. Sheehan**, Z. Li, S. T. Megeath, L. Looney, N. Karnath, J. Green, R. Gutermuth, W. Fischer, I. Stephens, M. M. Dunham, Y. Yang, BAAS, 51, 187
- 2019 **High Precision Dynamical Masses of Pre-Main Sequence Stars with ALMA and Gaia*
P. D. Sheehan, Y. Wu, J. A. Eisner, and J. J. Tobin, ApJ, 874, 136.
- 2018 *Exploring Protostellar Disk Formation with the ngVLA*
J. J. Tobin, **P. Sheehan** and D. Johnstone, Science With A Next-Generation Very Large Array, 189.

- 2018 *New Frontiers in Protostellar Multiplicity with the ngVLA*
J. J. Tobin, **P. Sheehan** and D. Johnstone, Science With A Next-Generation Very Large Array, 177.
- 2018 **Multiple Gaps in the Disk of the Class I Protostar GY 91*
P. D. Sheehan and J. A. Eisner, ApJ, 857, 18
- 2018 *The Orbit of the Companion to HD 100453A: Binary-driven Spiral Arms in a Protoplanetary Disk*
K. Wagner, R. Dong, **P. Sheehan**, D. Apai, M. Kasper, M. McClure, K. M. Morzinski, L. Close, J. Males, P. Hinz, S. P. Quanz, J. Fung, ApJ, 854, 130
- 2017 **Disk Masses for Embedded Class I Protostars in the Taurus Molecular Cloud*
P. D. Sheehan and J. A. Eisner, ApJ, 851, 45.
- 2017 *An ALMA Dynamical Mass Estimate of the Proposed Planetary Mass Companion FW Tau C*
Y. Wu and **P. D. Sheehan**, ApJL, 854, L26.
- 2017 **WL 17: A Young Embedded Transition Disk*
P. D. Sheehan and J. A. Eisner, ApJL, 840, 12.
- 2017 *An ALMA and MagAO Study of the Substellar Companion GQ Lup B: Constraints on the Accretion Disk Mass and Orbital Properties*
Y. Wu, **P. D. Sheehan**, J. R. Males, L. M. Close, K. M. Morzinski, J. K. Teske, A. Haug-Baltzell, N. Merchant, and E. Lyons, ApJ, 836, 223.
- 2016 **A VLA Survey For Faint Compact Radio Sources in the Orion Nebula Cluster*
P. D. Sheehan, J. A. Eisner, R. K. Mann, and J. Williams, ApJ, 831, 155.
- 2014 **Constraining the Disk Masses of the Class I Binary Protostar GV Tau*
P. D. Sheehan and J. A. Eisner, ApJ, 791, 19S

SECONDARY CONTRIBUTIONS

- 2025 *Advanced Data Products for radio observatories*
 Villard, E., A. Ahmadi, R. Bolton, S. Breen, S. Castro, C. De Breuck, N. Deg, M. Delli Veneri, E. Emsellem, S. Fleming, F. Guglielmetti, H. K. M., J. Hibbard, H. Holties, L. Humphreys, M. Iacobelli, P. Jachym, B. Jones, A. Kimball, K. E., M. Lacy, R. Loomis, M. Massardi, B. McGuire, B. Molina Montoro, S. Ndung'u, E. Orru, R. Pizzo, A. Plunkett, M. Romaniello, P. Schilke, H. Scolati, **P. Sheehan**, A. Shen, F. Stoehr, J. Swinbank, P. Teuben, J. Tobin, T. M. C., S. Wijnholds, and M. Zwaan, *A&C*, 54, 101003
- 2025 *HDO Ice Detected toward an Isolated Low-mass Protostar with JWST*
 Slavicinska, K., L. Tychoniec, M. G. Navarro, E. F. van Dishoeck, J. J. Tobin, M. L. van Gelder, Y. Chen, A. C. A. Boogert, W. B. Drechsler, H. Beuther, A. Caratti o Garatti, S. T. Megeath, P. Klaassen, L. W. Looney, P. J. Kavanagh, N. G. C. Brunken, **P. Sheehan**, and W. J. Fischer, *ApJL*, 986, L19
- 2025 *L1448 IRS3B: Dust Polarization Aligned with Spiral Features, Tracing Gas Flows*
 Looney, L. W., Z.-Y. D. Lin, Z.-Y. Li, J. J. Tobin, M. Radecki, S. Butte, I. W. Stephens, M. Fernández-López, H. Yang, N. K. Reynolds, **P. Sheehan**, W. Kwon, R. Harrison, and A. North, *ApJ*, 985, 148
- 2025 *JWST-IPA: Chemical Inventory and Spatial Mapping of Ices in the Protostar HOPS 370—Evidence for an Opacity Hole and Thermal Processing of Ices*
 Tyagi, H., P. Manoj, M. Narang, S. T. Megeath, W. R. M. Rocha, N. Brunken, A. E. Rubinstein, R. Gutermuth, N. J. Evans, E. F. Van Dishoeck, S. Federman, D. M. Watson, D. A. Neufeld, G. Anglada, H. Beuther, A. Caratti o Garatti, L. W. Looney, P. Nazari, M. Osorio, T. Stanke, Y.-L. Yang, T. L. Bourke, W. J. Fischer, E. Furlan, J. Green, N. Habel, P. Klaassen, N. Karnath, H. Linz, J. Muzerolle, J. J. Tobin, P. Atnagulov, R. Rahatgaonkar, **P. Sheehan**, K. Slavicinska, A. M. Stutz, L. Tychoniec, S. Wolk, and W. Zakri, *ApJ*, 983, 110
- 2024 *Investigating Protostellar Accretion-driven Outflows across the Mass Spectrum: JWST NIRSpec Integral Field Unit 3–5 μ m Spectral Mapping of Five Young Protostars*
 Federman, S. A., S. T. Megeath, A. E. Rubinstein, R. Gutermuth, M. Narang, H. Tyagi, P. Manoj, G. Anglada, P. Atnagulov, H. Beuther, T. L. Bourke, N. Brunken, A. Caratti o Garatti, N. J. Evans, W. J. Fischer, E. Furlan, J. D. Green, N. Habel, L. Hartmann, N. Karnath, P. Klaassen, H. Linz, L. W. Looney, M. Osorio, J. Muzerolle Page, P. Nazari, R. Pokhrel, R. Rahatgaonkar, W. R. M. Rocha, **P. Sheehan**, K. Slavicinska, T. Stanke, A. M. Stutz, J. J. Tobin, L. Tychoniec, E. F. Van Dishoeck, D. M. Watson, S. Wolk, and Y.-L. Yang, *ApJ*, 966, 41
- 2024 *JWST observations of i SUP $\dot{\epsilon}$ 13*i*/SUP $\dot{\epsilon}$ CO*i*SUB $\dot{\epsilon}$ 2*i*/SUB $\dot{\epsilon}$ ice. Tracing the chemical environment and thermal history of ices in protostellar envelopes*
 Brunken, N. G. C., W. R. M. Rocha, E. F. van Dishoeck, R. Gutermuth, H. Tyagi, K. Slavicinska, P. Nazari, S. T. Megeath, N. J. Evans, M. Narang, P. Manoj, A. E. Rubinstein, D. M. Watson, L. W. Looney, H. Linnartz, A. Caratti o Garatti, H. Beuther, H. Linz, P. Klaassen, C. A. Poteet, S. Federman, G. Anglada, P. Atnagulov, T. L. Bourke, W. J. Fischer, E. Furlan, J. Green, N. Habel, L. Hartmann, N. Karnath, M. Osorio, J. Muzerolle Page, R. Pokhrel, R. Rahatgaonkar, **P. Sheehan**, T. Stanke, A. M. Stutz, J. J. Tobin, L. Tychoniec, S. Wolk, and Y.-L. Yang, *A&A*, 685, A27

- 2024 *Early Planet Formation in Embedded Disks (eDisk). XIV. Flared Dust Distribution and Viscous Accretion Heating of the Disk around R CrA IRS 7B-a*
Takakuwa, S., K. Saigo, M. Kido, N. Ohashi, J. J. Tobin, J. K. Jørgensen, Y. Aikawa, Y. Aso, S. Gavino, I. Han, P. M. Koch, W. Kwon, C. W. Lee, J.-E. Lee, Z.-Y. Li, Z.-Y. D. Lin, L. W. Looney, S. Mori, J. (Insa C. Sai, R. Sharma, **P. D. Sheehan**, K. Tomida, J. P. Williams, Y. Yamato, and H.-W. Yen, ApJ, 964, 24
- 2024 *The Disk Orientations of Perseus Protostellar Multiples at 8 au Resolution*
Reynolds, N. K., J. J. Tobin, **P. D. Sheehan**, S. I. Sadavoy, L. W. Looney, K. M. Kratter, Z.-Y. Li, D. M. Segura-Cox, and N. A. Kaib, ApJ, 963, 164
- 2024 *Discovery of a Collimated Jet from the Low-luminosity Protostar IRAS 16253-2429 in a Quiescent Accretion Phase with the JWST*
Narang, M., P. Manoj, H. Tyagi, D. M. Watson, S. T. Megeath, S. Federman, A. E. Rubinstein, R. Gutermuth, A. Caratti o Garatti, H. Beuther, T. L. Bourke, E. F. Van Dishoeck, N. J. Evans, G. Anglada, M. Osorio, T. Stanke, J. Muzerolle, L. W. Looney, Y.-L. Yang, P. Klaassen, N. Karnath, P. Atnagulov, N. Brunken, W. J. Fischer, E. Furlan, J. Green, N. Habel, L. Hartmann, H. Linz, P. Nazari, R. Pokhrel, R. Rahatgaonkar, W. R. M. Rocha, **P. Sheehan**, K. Slavicinska, A. M. Stutz, J. J. Tobin, L. Tychoniec, and S. Wolk, ApJL, 962, L16
- 2024 *IRAS4A1: Multiwavelength continuum analysis of a very flared Class 0 disk*
Guerra-Alvarado, O. M., N. van der Marel, J. Di Francesco, L. W. Looney, J. J. Tobin, E. G. Cox, **P. D. Sheehan**, D. J. Wilner, E. Macías, and C. Carrasco-González, A&A, 681, A82
- 2023 *Grain Growth and Dust Segregation Revealed by Multiwavelength Analysis of the Class I Protostellar Disk WL 17*
Han, I., W. Kwon, Y. Aso, J. Bae, and **P. Sheehan**, ApJ, 956, 9
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Summary: 22 conferences; 9 departmental talks; 6 colloquia; 15 invited; 31 total

- 2025 **Advanced Data Products in the Broadband Era*
Astrochemistry in the Broadband Era, Portland, Maine
- 2025 **The Demographics of Protostellar Disks*
NAU Colloquium, Flagstaff, Arizona
- 2024 *Automated Self-calibration: Science Quality Data Without the Hassle*
Advanced Data Products Workshop, Garching, Germany
- 2024 **The Demographics of Protostellar Disks*
NRAO Colloquium, Socorro, New Mexico
- 2024 *Sub-mm Variability in the Envelope & Warped Protostellar Disk of the Class 0 Protostar HOPS 358*
Born in Fire: Eruptive Stars and Planet Formation, Santiago, Chile
- 2023 **The Demographics of Protostellar Disks*
Star Formation Seminar, CEA Saclay, Virtual
- 2023 *The Demographics of Protostellar Disks*
AAS Winter Meeting, Seattle, Washington
- 2022 *I Can't Believe Its Not Radiative Transfer: Surrogate Modeling for Protoplanetary Disk Models*
AAPF Fellows Symposium, Virtual
- 2021 **Unveiling Planet Formation in the Youngest Disks*
University of Michigan Colloquium, Ann Arbor, Michigan
- 2021 **Substructures in Embedded Disks: Insights from the VANDAM Orion Survey*
MIAPP Program: Gaps, Rings, Spirals, and Vortices: Structure Formation in Planet-Forming Disks, Garching, Germany
- 2021 **Unveiling Planet Formation in the Youngest Disks*
NRAO Special Seminar, Virtual, based in Charlottesville, Virginia
- 2021 *Witnessing Planet Formation in the Youngest Protostellar Disks*
NSF AAPF Fellows Symposium 2021, Virtual
- 2020 **Planet Formation in Embedded Disks*
HLTau 2020, Virtual, based in Santiago, Chile
- 2020 **Understanding Star and Planet Formation with Radio Observations*
IIT Colloquium, Virtual, based in Chicago, Illinois
- 2020 *Protoplanetary Disk Chemodynamics as a Scale for Weighing Young Stars and Planets*
Thinkshop on Protoplanetary Disk Chemodynamics, Potsdam, Germany (postponed due to COVID-19)
- 2020 *The Demographics of Protostellar Disks*
Cores2Disks Workshop, Charlottesville, Virginia (postponed due to COVID-19)
- 2019 **Our Current Picture of Substructures in Protostellar Disks*
ALMA Workshop 2019, Tokyo, Japan
- 2019 *The Structures of Embedded Disks with ALMA*
Great Barriers in Planet Formation, Palm Cove, Australia

- 2019 **The Structures of Embedded Disks with ALMA/the VLA*
NRAO Postdoc Symposium, Charlottesville, Virginia
- 2019 **Know Thy Star Mass, Know thy Disk Mass, Know Thy Planet: Protoplanetary Disk and Stellar Mass Measurements with ALMA*
NRAO TUNA Lunch, Charlottesville, Virginia
- 2018 **Radio Observations of Disks, From Protostars to Protoplanets*
CIERA Theory Group, Chicago, Illinois
- 2018 *Constraints on Embedded Disk Structures and Masses as Seen by CARMA and ALMA*
Stars: From Birth to Death, Honolulu, Hawai'i
- 2018 *Constraints on Embedded Disk Structures and Masses as Seen by CARMA and ALMA*
COSPAR Assembly, Pasadena, California
- 2018 *Constraints on the Structure of Embedded Disks with ALMA/the VLA: Setting the Stage for the ngVLA*
Astrophysical Frontiers of the Next Decade and Beyond, Portland, Oregon
- 2018 *Constraints on Embedded Disk Structures and Masses as Seen by CARMA and ALMA*
Olympian Symposium, Paralia, Greece
- 2018 *Constraints on Embedded Disk Structures and Masses as Seen by CARMA and ALMA*
The Early Phase of Star Formation, Ringburg Castle, Germany
- 2018 **Radio Observations of Disks, From Protostars to Protoplanets*
CASA/JILA Friday Lunch Seminar, Boulder, Colorado
- 2017 **Physical Structure of Class I Disks: Constraints on Disk Masses During the Embedded Phase*
Leiden Embedded Disks Workshop, Leiden, Netherlands
- 2015 *Gauging the Potential for Planet Formation in Protoplanetary Disks*
Star and Planet Formation in the Southwest 1, Tucson, Arizona
- 2013 *Measuring the Disk Masses of Class I Protostars*
CARMA Symposium, Chicago, Illinois
- 2010 *Rainfall onto the Protostellar Disk of IRAS 13036*
National Conference on Undergraduate Research, Missoula, Montana