

# John J. Tobin

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National Radio Astronomy Observatory  
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**RESEARCH AREAS** Star and planet formation  
Envelopes around Youngest protostars  
Disk formation/Protostellar and proto-planetary disks  
Multiple star formation  
Outflows and jets from protostellar objects

**EDUCATION**

**University of Michigan**  
**Ph.D:** Astronomy and Astrophysics, June 2011  
Advisors: Lee Hartmann and Edwin Bergin  
**MS:** Astronomy and Astrophysics, June 2008

**University of Illinois Urbana-Champaign,**  
**BS:** Astronomy, May 2006, High Distinction

**PROFESSIONAL EXPERIENCE**

**National Radio Astronomy Observatory**  
Associate Scientist 2018- present

**University of Oklahoma**  
Homer L. Dodge Assistant Professor 2016 – 2018

**Leiden Observatory**  
NWO Veni Fellow 2014 – 2016

**National Radio Astronomy Observatory**  
Hubble Fellow 2011 – 2014

**University of Michigan**  
Research Assistant 2006 – 2011

**University of Illinois**  
Undergraduate Research Assistant 2005 – 2006

**TEACHING EXPERIENCE**

**University of Oklahoma**  
Introductory Astronomy, Fall 2017

**University of Oklahoma**  
Advanced Observatory Methods, Spring 2017, 2018

**University of Michigan**  
Substitute Lecturer, Spring 2010  
Star Formation Lectures for Introductory Classes  
Graduate Student Instructor, 2007  
Introductory Astronomy Lab and Discussion Leader

**University of Illinois**  
Teaching Assistant, Fall 2005 - Extraterrestrial Life

## GRANTS

SOFIA Cycle 6 (2018-2019): \$91,700  
Hubble Space Telescope Cycle 25: \$24,585  
NRAO Student Observing Support (2017-2018): \$29,394  
NRAO Student Observing Support (2016-2017): \$29,694  
NWO Veni Fellowship (2014-2017): 250,000 Euros  
Hubble Postdoctoral Fellowship (2011-2014): ~\$325,000  
SOFIA Cycle 3 (2014-2017): \$19,500  
*Herschel* Open Time 2 (2012-2015) Total: \$53,194  
*Herschel* Open Time 1 (2011-2013) Total: \$18,990

## OTHER RELEVANT EXPERIENCE

### **United States Army**

Non-Commissioned Officer (Sergeant)	2001-2003
Training NCO	2001-2003
Training NCO Assistant	1999-2001
Cannon Crew-member	1999-2001

## SELECTED OBSERVATIONAL PROGRAMS

PI: SOFIA Cycle 6 “should do” priority  
Outflow Energetics in the Heart of NGC 1333: FIFI-LS Spectroscopy of the  
SVS13/HH 7-11 Region (9.1 hours)

PI: ALMA Cycle 5  
Are Close Binaries Formed through Disk Fragmentation? (A-rank - 6.5 hours)  
The Hunter's Gift: A Bounty of Forming Disks to Further Our Understanding  
of Protostellar Evolution (C-rank - 26.2 hours)

PI: ALMA Cycle 4  
Spiral Structure and Clump Kinematics in L1448 IRS3B (A-rank - 3.2 hours)

PI: ALMA Cycle 3  
The Orion Disk and Multiplicity Survey (A-rank - 9.2 hours)

PI: VLA Large Program (340 hours)  
The VLA Orion Disk and Multiplicity Survey  
Survey of 148 Protostars in Orion at 30 AU resolution (9mm)

PI: VLA Large Program (264 hours) – 2013 - 2015  
The VLA Nascent Disk and Multiplicity (VANDAM) Survey  
8 mm/1 cm imaging of all protostars (94) in Perseus molecular  
cloud at 15 AU resolution

## STUDENT SUPERVISION

Nickalas Reynolds (University of Oklahoma) – Ph.D project 2016 - present  
Rajeeb Sharma (University of Oklahoma) – Graduate research 2017 – present  
Lisa Patel (University of Oklahoma) – Undergrad research 2017 - present  
Kyler Rogers (University of Oklahoma) – Undergrad research – 2017 - present  
Brian Stephenson (University of Oklahoma) – Senior project 2016-2017  
Merel van t' Hoff (Leiden University) – Ph.D project 2015-present  
Paper submitted  
Lukasz Tychoniec (Leiden/AMU-Poland) – LEAPS Project 2015-present  
Paper published, 2<sup>nd</sup> paper in preparation  
Steven Bos (Leiden University) – Masters Project 2015-2016  
Paper published  
Nadia Murillo (Leiden University) – Ph.D project 2014-2016  
Paper published  
Nicholas Kern (U. Michigan) – NRAO Summer 2013 REU, Independent VLA  
project 2013-2015, paper published  
Adrian Mead (U. Virginia) – NRAO Summer 2013 REU, 2011/2012 Near-IR  
observing at Fan Mountain Observatory  
Arlo Osler (U. Kansas) - NRAO Summer 2012 REU

## RECENT INVITED AND CONTRIBUTED TALKS:

Star and Planet Formation in the Southwest 2 (invited), March 2018  
University of Texas, Colloquium, January 2018  
ALMA Long Baseline Workshop, Kyoto, Japan (invited), October 2017  
Next Generation VLA Workshop (contributed), June 2017  
Star Formation from Cores to Clusters, Santiago, CL, March 2017  
University of Virginia/NRAO Colloquium, February 2017  
Early Phases of Star Formation, Ringberg, Germany (invited), June 2016  
University of Cologne, Colloquium, May 2016  
University of Toronto, Colloquium, March 2016  
York University, Colloquium, March 2016  
University of Oklahoma, Colloquium, February 2016  
UC Berkeley, Colloquium, February 2016  
University of Chicago, Colloquium, January 2016  
Niels Bohr Institute, Colloquium, November 2015  
From Clouds to Protoplanetary Disks: the Astrochemical Link,  
October 2015 (Invited)  
Zermatt ISM Symposium, September 2015  
IPAG Grenoble Colloquium, April 2015  
Kapteyn Institute/SRON Colloquium, March 2015  
NRAO/University of Virginia, Colloquium, March 2015  
University of Washington, Colloquium, February 2015  
Chemical Diagnostics of Star and Planet Formation with Cycle 4 ALMA,  
January 2015, (invited)  
Circumstellar Disks and Planet Formation, University of Michigan,  
October 2014 (invited)  
Yale University Colloquium, October 2014  
Rice University Colloquium, February 2014  
AAAS Science Symposium, February 2014 (invited)

## SERVICE

Scientific Advisory Committee, Early Phases of Star Formation May 2018  
ESO Observational Program Committee, Nov. 2017 - present  
Co-Chair, Embedded Disk and Planet Formation Workshop, Leiden; July 2017  
Scientific Advisory Committee, Cores to Clusters, Santiago, CL March 2017  
Next Generation VLA Cradle of Life Working Group (2014-present)  
SKA Cradle of Life Working Group (2015-present)  
Leiden/ESA Astrophysics Program for Summer Students (LEAPS) Coordinator (2014-2015)  
NRAO Undergraduate/REU Mentor, 2011 - 2014  
Referee for *Nature*, *ApJ*, *A&A*, and *RevMexAA* (ongoing)  
Star Formation Discussion Organizer (Leiden, 2014 -present)  
NRAO-UVA Lunch Talk (TUNA) Organizer (2012 - 2013)  
Star Formation Journal Club Organizer (Michigan, 2008 - 2010)  
Graduate Student Lunch Talk Organizer (Michigan, 2008 – 2010)

## AWARDS

Roger Doxsey Prize Runner-up (AAS Dissertation Travel Grant)  
High Distinction in Astronomy, University of Illinois  
Stanley P. Wyatt Memorial Award, 2006, Top Undergraduate student in Astronomy  
Rackham Dissertation Fellowship  
Hubble Fellowship  
NWO (Netherlands Scientific Research Organization) Veni Fellowship

## PRESS COVERAGE

Space's Deepest Secrets – TV Documentary, early-2017

Astronomy Picture of the Day – December 2, 2016

<https://apod.nasa.gov/apod/ap161202.html>

Young Stellar System Caught in Act of Forming Close Multiples (Oct. 2016)

<https://public.nrao.edu/news/pressreleases/stellar-system-caught>

VLA Reveals Dramatic New Evidence About Star, Planet Formation

<https://public.nrao.edu/news/pressreleases/star-and-planet-formation>

New Studies Give Strong Boost to Binary-Star Formation Theory (Dec. 2013)

<https://public.nrao.edu/news/pressreleases/new-study-boosts-binary-star-formation-theory>

Astronomers Discover and "Weigh" Infant Solar System (Dec. 2012)

<http://www.nrao.edu/pr/2012/youngsystem/>

Baby Star Caught in the Act of Growing (Dec. 2012)

<http://www.space.com/18774-baby-protostar-growing.html>

A Very Young Disk in Scattered Light (Sept. 2010)

<http://www.gemini.edu/node/11520>

Two Peas in an Irregular Pod: How Binary Stars may Form (May 2010)  
<http://www.jpl.nasa.gov/news/news.cfm?release=2010-170>

Baby Picture of our Solar System, L1157 Envelope (Nov. 2007)  
[http://www.nasa.gov/mission\\_pages/spitzer/multimedia/spitzer20071129.html](http://www.nasa.gov/mission_pages/spitzer/multimedia/spitzer20071129.html)

## SKILLS

Data Reduction Software:

IRAF, MIRIAD, MIR, CASA, IDL, GILDAS, HIPE

Data Reduction/Observational Knowledge:

Near/Mid-IR imaging, Near-IR spectroscopy, Optical Imaging,  
Multi-Object Echelle Spectroscopy, *Herschel* far-IR mapping and  
spectroscopy, Radio Interferometry (PdBI, CARMA, SMA, VLA,  
ALMA), Single-Dish Radio (IRAM 30m, GBT, JCMT)

Programming Languages:

C++, IDL, Fortran, C-Shell, Python, HTML

PROFESSIONAL  
REFERENCES

*Lee Hartmann*  
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University of Michigan  
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## Refereed Publications

96. **Tobin, J. J.**, Bos, S. P., Dunham, M. M., Bourke, T. L., van der Marel, N., 2018, “The Envelope Kinematics and a Possible Disk Around the Class 0 Protostar within BHR7,” ApJ, in press.
95. Cox, E. G., Harris, R. J.; Looney, L. W.; Li, Z.-Y.; Yang, H.; Tobin, J. J.; Stephens, Ian, 2018, “ALMA’s Polarized View of 10 Protostars in the Perseus Molecular Cloud,” ApJ, in press., arXiv:1802.00449
94. Pokhrel (+9 co-authors and **Tobin, J. J.**), 2018, “Hierarchical fragmentation in the Perseus molecular cloud: From the cloud scale to protostellar objects,” ApJ, 858, 5
93. Principe, D. (+11 co-authors and **Tobin, J. J.**), 2018, “The ALMA early science view of FUor/EXor objects – IV. Misaligned outflows in the complex star-forming environment of V1647 Ori and McNeil’s Nebula,” MNRAS, 473, 879
92. Díaz-Rodríguez, A. K.; Osorio, M.; Anglada, G.; Megeath, S. T.; Rodríguez, L. F.; **Tobin, J. J.**; (+ 9 co-authors), 2017, “HOPS 108: Star-formation triggered by a non-thermal jet?,” ApJ, in press. arXiv:1712.00596
91. Cieza, L.; (+10 co-authors and **Tobin, J. J.**), 2018, “The ALMA early science view of FUor/EXor objects - V: continuum disc masses and sizes,” MNRAS, 474, 4347
90. Tychoniec, L.; **Tobin, J. J.** (+9 co-authors), 2018, “The VLA Nascent Disk And Multiplicity Survey of Perseus Protostars (VANDAM). III. Extended Radio Emission from Protostars in Perseus,” ApJ, 852, 18
89. Cox, E., (+7 co-authors and **Tobin, J. J.**), 2017, “Protoplanetary Disks in rho Ophiuchus as Seen From ALMA,” ApJ, 851, 83
88. Sadavoy, S., (+9 co-authors and **Tobin, J. J.**), 2017, “Intensity-Corrected Herschel Observations of Nearby Isolated Low-Mass Clouds,” ApJ, 852, 102
87. Stephens, I. (+15 co-authors and **Tobin, J. J.**), 2017, “Alignment between Protostellar Outflows and Filamentary Structure,” ApJ, 846, 16
86. Da Rio, N. (+15 co-authors and **Tobin, J. J.**), 2017, “IN-SYNC. V. Stellar Kinematics and Dynamics in the Orion A Molecular Cloud,” ApJ, 845, 105
85. Ruíz-Rodríguez, D.; Cieza, L. A.; Williams, J. P.; Principe, D.; **Tobin, J. J.**; Zhu, Z.; Zurlo, A., 2017 “The ALMA early science view of FUor/EXor objects - III. The slow and wide outflow of V883 Ori,” MNRAS, 468, 3266
84. Frimann, S. (+ 7 co-authors and **Tobin, J. J.**), 2017, “Protostellar accretion traced with chemistry. High-resolution C<sup>18</sup>O and continuum observations towards deeply embedded protostars in Perseus,” A&A, 602, 120

83. Fischer, W. J.; Megeath, S. T.; Furlan, E.; Ali, B.; Stutz, A. M.; **Tobin, J. J.**, (+9 co-authors), 2017, "The Herschel Orion Protostar Survey: Luminosity and Envelope Evolution," *ApJ*, 840, 69
82. Osoria, M., Diaz-Rodriguez, A. K., Anglada, G., Megeath, S. T., Rodriguez, L. F., **Tobin, J. J.**, (+11 co-authors), "Star Formation Under the Outflow: The Discovery of a Non-thermal Jet from OMC-2 FIR 3 and Its Relationship to the Deeply Embedded FIR 4 Protostar," *ApJ*, 840, 36
81. Ruíz-Rodríguez, D.; Cieza, L. A.; Williams, J. P.; **Tobin, J. J.** (+9 co-authors), 2017, "The ALMA early science view of FUor/EXor objects - II. The very wide outflow driven by HBC 494," *MNRAS*, 466, 3519
80. Kirk, H.; Dunham, M. M.; Di Francesco, J.; Johnstone, D.; Offner, S. S. R.; Sadavoy, S. I.; **Tobin, J. J.**, (+7 co-authors), 2017, "ALMA Observations of Starless Core Substructure in Ophiuchus," *ApJ*, 838, 114
79. Zurlo, A. (+13 co-authors and **Tobin, J. J.**), 2017, "The ALMA early science view of FUor/EXor objects – I. Through the looking-glass of V2775 Ori," *MNRAS* 465, 834
78. Ortiz-Leon, G. (+15 co-authors and **Tobin, J. J.**), 2016, "The Gould's Belt Distances Survey (GOBELINS) I. Trigonometric parallax distances and depth of the Ophiuchus complex," *ApJ*, 843, 141, arXiv:1611:0466
77. Dzib, S. A. (+9 co-authors and **Tobin, J. J.**), 2016, "Radio Measurements of the stellar proper motions in the core of the Orion Nebula Cluster," 2016, *ApJ*, 834, 139
76. Manoj, P. (+8 co-authors and **Tobin, J. J.**), 2016, "The Evolution of Far-infrared CO Emission from Protostars," *ApJ*, 831, 69
75. **Tobin, J. J.**, (+9 co-authors), 2016, "Characterizing the Youngest Herschel-detected Protostars II. Characterizing outflows with CARMA CO (J=1-0) and PACS spectroscopy," *ApJ*, 831, 36
74. Gonzalez-Garcia, B. (+11 co-authors and **Tobin, J. J.**), "Herschel/PACS far-IR spectral imaging of a jet from an intermediate mass protostar in the OMC-2 region," *A&A*, 596, 26
73. **Tobin, J. J.**, (+10 co-authors), 2016, "A Triple Protostar System Formed via Fragmentation of a Gravitationally Unstable Disk," *Nature*, 538, 483
72. Ortiz-Leon, G. (+15 co-authors and **Tobin, J. J.**), 2016, "The Gould's Belt Distances Survey (GOBELINS) III. The distance to the Serpens/Aquila Molecular Complex," *ApJ*, 834, 143
71. Storm, S. (+20 co-authors and **Tobin, J. J.**), 2016, "CARMA Large Area Star Formation Survey: Dense Gas in the Young L1451 Region of Perseus," *ApJ*, 830, 127
70. Koumpia, E., van der Tak, F., Kwon, W., **Tobin, J. J.**, Fuller, G. A., Plume, R., "Evolutionary status of dense cores in the NGC 1333 IRAS 4 star-forming region," *A&A*, 595, 51
69. Pokhrel, R. (+9 co-authors and **Tobin, J. J.**), "A Herschel-SPIRE survey of the Mon R2 giant molecular cloud: analysis of the gas column density probability density function," *MNRAS*, 461, 22

68. Kounkel, M. (+13 co-authors and **Tobin, J.J.**), “The Gould's Belt Distances Survey (GOBELINS) II. Distances and structure towards the Orion Molecular Clouds,” *ApJ*, 834,142
67. Watson, D.M. (+10 co-authors and **Tobin, J.J.**), “Evolution of Mass Outflow in Protostars,” *ApJ*, 828, 52
66. Yang, H. (+6 co-authors and **Tobin, J.J.**), “Disc polarization from both emission and scattering of magnetically aligned grains: the case of NGC 1333 IRAS 4A1,” *MNRAS*, 460, 4109
65. Cieza, L. A., Casassus, S., **Tobin, J.J.**, (+13 co-authors), “Imaging the water snow-line during a protostellar outburst,” *Nature*, 535, 258
64. Murillo, N., van Dishoeck, E., **Tobin, J.J.**, Fedele, D., 2016, “Do siblings always form and evolve simultaneously? Testing the coevality of multiple protostellar systems through SEDs,” *A&A*, 592, 56
63. Dunham, M. (+12 co-authors and **Tobin, J.J.**), 2016, “An ALMA Search for Substructure, Fragmentation, and Hidden Protostars in Starless Cores in Chamaeleon I,” *ApJ*, 823, 160
62. Furlan, E., (+13 co-authors and **Tobin, J.J.**), 2016, “The Herschel Orion Protostar Survey: Spectral Energy Distributions and Fits Using a Grid of Protostellar Models,” 224, 5
61. Persson, M. .V., Harsono, D., **Tobin, J.J.**, (+4 co-authors), 2016, “Constraining the physical structure of the inner few 100 AU scales of deeply embedded low-mass protostars,” *A&A*, 590, 33
60. Kounkel, M., Hartmann, L., **Tobin, J.J.**, (+3 co-authors), 2016, “Spectroscopic Binaries in the Orion Nebula Cluster and NGC 2264,” *ApJ*, 821, 8
59. Lee, K. I., (+10 co-authors and **Tobin, J.J.**), 2016, “Misalignment of Outflow Axes in the Protomultiple Systems in Perseus,” *ApJ*, 820, 2
58. Da Rio, N., (+15 co-authors and **Tobin, J.J.**), 2016, “IN-SYNC. IV. The Young Stellar Population in the Orion A Molecular Cloud,” *ApJ*, 818, 59
57. Pech, G. (+13 co-authors and **Tobin, J.J.**), 2016, “The Gould’s Belt Very Large Array Survey. V. The Perseus Region,” *ApJ*, 818, 116
- 56.. Segura-Cox, D., Harris, R. J., **Tobin, J. J.**, (+8 co-authors), 2016, “The VLA Nascent Disk And Multiplicity (VANDAM) Survey of Perseus Protostars (VANDAM). III. A First Look at Candidate Class 0/I Disks in the Perseus Molecular Cloud” *ApJL*, 817, 14
55. **Tobin, J. J.**, (+10 co-authors), 2016, “The VLA Nascent Disk And Multiplicity (VANDAM) Survey of Perseus Protostars (VANDAM). II. The Multiplicity of the Perseus Star Forming Region”, *ApJ*, 818, 73
54. Kern, N. S., Keowen, J. A., **Tobin, J. J.**, Mead, A. Gutermuth, R. A., 2015, “Radio Properties of Young Stellar Objects in the Core of the Serpens South Infrared Dark Cloud”, *AJ*, 151, 42

53. Cox, E. G., (+10 co-authors and **Tobin, J. J.**), 2015, “High Resolution 8 mm and 1 cm Polarization of IRAS 4A from the VLA Nascent Disk and Multiplicity (VANDAM) Survey” *ApJL*, 814, 28
52. Lee, I.-J., Dunham, M. M., Myers, P.C., **Tobin, J. J.** (+20 co-authors), 2015, “Mass Assembly of Stellar Systems and Their Evolution with the SMA (MASSES), Multiplicity and the Physical Environment in L1448N”, *ApJ*, 814, 114
51. van der Marel, N., Pinilla, P. **Tobin, J. J.**, (+4 co-authors), 2015, “A Concentration of Centimeter-sized Grains in the Ophiuchus IRS 48 Dust Trap,” *ApJL*, 810, 7
50. **Tobin, J. J.**, (+9 co-authors), 2015, “A Sub-arcsecond Survey Toward Class 0 Protostars in Perseus: Searching for Signatures of Protostellar Disks,” *ApJ*, 805, 125
49. Ortiz-Leon, Gisela N. (+13 co-authors and **Tobin, J. J.**), “The Gould's Belt Very Large Array Survey. II. The Serpens Region”, *ApJ*, 805, 9
48. Dzib, S. A., (+13 co-authors and **Tobin, J. J.**), 2013, “The Gould's Belt Very Large Array Survey IV: The Taurus-Auriga Complex”, *ApJ*, 801, 91
47. **Tobin, J. J.**, Hartmann, L., Furesz, G., Hsu, Wen-Hsin, Mateo, M., 2015, “Kinematic and Spatial Substructure in NGC 2264,” *AJ*, 149, 119
46. Safron, E. J. (+12 co-authors and **Tobin, J. J.**), 2014, “HOPS 383, An Outbursting Class 0 Protostar in Orion,” *ApJL*, 800, 5
45. Segura-Cox., D., Looney, L. W., Stephens, I., Fernandez-Lopez, M., Kwon, W., **Tobin, J. J.**, Li, Z.-Y., Crutcher, R., 2014, “The Magnetic Field in the Class 0 Protostellar Disk of L1527,” *ApJL*, 798, 2
44. **Tobin, J. J.**, (+10 co-authors), 2015, “Characterizing the Youngest Herschel-detected Protostars I. Envelope Structure Revealed by CARMA Dust Continuum Observations,” *ApJ*, 798, 128
43. **Tobin, J. J.**, (+13 co-authors), 2015, “First Results from the VLA Nascent Disk And Multiplicity (VANDAM) Survey of Perseus Protostars (VANDAM). Resolving the Sub-Arcsecond Binary System in NGC 1333 IRAS2A,” *ApJ*, 798, 61
42. Lee, I.-J. (+22 co-authors and **Tobin, J. J.**), 2014, “CARMA Large Area Star Formation Survey: Structure and Kinematics of Dense Gas in Serpens Main”, *ApJ*, 797, 76
41. Davidson, J. (+11 co-authors and **Tobin, J. J.**), 2014, “Testing Magnetic Field Models for the Class 0 Protostar L1527”, *ApJ*, 797, 74
40. Storm, S. (+25 co-authors and **Tobin, J. J.**), 2014, “CARMA Large Area Star Formation Survey: Project Overview with Analysis of Dense Gas Structure and Kinematics in Barnard 1,” *ApJ*, 794, 165
39. Fernandez-Lopez, M. (+16 co-authors and **Tobin, J. J.**), 2014, “CARMA Large Area Star Formation Survey: Observational Analysis of Filaments in the Serpens South Molecular Cloud,” *ApJL*, 790, 19

38. Kounkel, M. (+12 co-authors and **Tobin, J. J.**), 2014, “The Gould's Belt Very Large Array Survey. III. The Orion Region,” *ApJ*, 790, 49
37. Furlan, E. (+8 co-authors and **Tobin, J. J.**), 2014, “On the Nature of the Deeply Embedded Protostar OMC-2 FIR 4,” *ApJ*, 786, 26
36. Hull, C. L. H. (+23 co-authors and **Tobin, J. J.**), 2014, “TADPOL: A 1.3 mm Survey of Dust Polarization in Star Forming Cores and Regions,” *ApJS*, 213, 13
35. Dunham, M. (+9 co-authors and **Tobin, J. J.**), 2013, “The Evolution of Protostars: Insights from Ten Years of Infrared Surveys with Spitzer and Herschel”, *Protostars and Planets VI*, University of Arizona Press, 195
34. Fischer, W. J., Megeath, S. T., **Tobin, J. J.**, Hartmann, L., Kounkel, M., Poteet, C. A., Ali, B., Remming, I., Stanke, T., Watson, D. M., 2013, “HOPS 136: An Edge-On Orion Protostar Near the End of Envelope Infall,” *ApJ*, 781, 123
33. **Tobin, J. J.**, (+11 co-authors), 2013, “VLA and CARMA Observations of Protostars in the Cepheus Clouds: Sub-arcsecond Proto-Binaries Formed via Disk Fragmentation”, *ApJ*, 779, 93
32. Dzib, S. A., (+13 co-authors and **Tobin, J. J.**), 2013, “The Gould's Belt Very Large Array Survey I: The Ophiuchus complex”, *ApJ*, 775, 63
31. **Tobin, J. J.**, Hartmann, L., Chiang, Hsin-Fang, Wilner, D. J., Looney, L. W., Loinard, L., Calvet, N., D'Alessio, P., “ Modeling the Resolved Disk Around the Class 0 Protostar L1527”, *ApJ*, 771, 48
30. Stutz, A. M., **Tobin, J. J.**, (and 12 co-authors), 2013, “A *Herschel* and APEX Census of the Reddest Sources in Orion: Searching for the Youngest Protostars”, *ApJ*, 767, 36
29. Wright, E. L.; (+13 co-authors and **Tobin, J. J.**), 2013, “A T8.5 Brown Dwarf Member of the Xi Ursae Majoris System”, *AJ*, 145, 844
28. **Tobin, J. J.**, Bergin, E.A., Hartmann, L., Lee, J.-E., Maret, S., Myers, P. C., Looney, L. W., Chiang, H.-F., Friesen, R., 2013, “Resolved Depletion Zones and Spatial Differentiation of N<sub>2</sub>H<sup>+</sup> and N<sub>2</sub>D<sup>+</sup>”, *ApJ*, 765, 18
27. **Tobin, J. J.**, Hartmann, L.; Chiang, H.-F.; Wilner, D. J.; Looney, L. W.; Loinard, L.; Calvet, N.; D'Alessio, P., 2012, “A ~0.2-solar-mass protostar with a Keplerian disk in the very young L1527 IRS system”, *Nature*, 492, 83
26. Hull, C. L. H.; (+23 co-authors and **Tobin, J. J.**), 2013, “Misalignment of Magnetic Fields and Outflows in Protostellar Cores”, *ApJ*, 768, 159
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