

Curriculum Vitae – Tyler Leonard BOURKE

Current Work Address: Harvard-Smithsonian Center for Astrophysics
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Current Position: Astronomer, Smithsonian Astrophysical Observatory (SAO)

Higher Education:

PhD	University of New South Wales (UNSW); Astronomy (Predoctoral Fellow, SAO, 1994–98)	1999
MSc	University of New South Wales (UNSW); Astronomy	1994
BSc	Australian National University (ANU); Physics Honours	1989

Professional Experience:

Co-Investigator, Spitzer Space Telescope Legacy Program “Gould’s Belt” (PI Lori Allen)	2006–
Visiting Scientist, SAO	2006–2007
Submillimeter Array Postdoctoral Fellow, SAO	2002–2006
Associate Investigator, Spitzer Space Telescope Legacy Program “c2d” (PI Neal Evans)	2001–
Postdoctoral Fellow, SAO	1999–2002
Postdoctoral Fellow, Anglo-Australian Observatory & Australia Telescope National Facility (AAO/ATNF)	1998–1999
Research Assistant, School of Physics, ADFA, UNSW	1992–1993
Research Scientist, Centre for Spatial Information Systems, Division of Information Technology, CSIRO, Canberra, Australia	1990–1991
Research Assistant, Dept. of Physics, ANU	1990

Student Supervision:

Kimberly De Rose (Harvard), Undergraduate Research	2005–08
Miquela Vigil (MIT), Senior Research Thesis, Masters Thesis	2002–04
Mia Bovill (Univ. Maryland), SAO Summer Intern Program	2002

Teaching Experience:

Harvard University, Guest Lecturer, Astronomy 1	2008
Swinburne Astronomy Online	2000-2006
Course Instructor, HET 603 <i>Exploring Stars and the Milky Way</i>	
Project Supervisor, #29 <i>Search for Other Worlds</i> , #69 <i>How Rare is Earth?</i> #73 <i>Where are Star Born?</i>	
1st Year Undergraduate Physics Laboratory Demonstrator, ADFA, UNSW	1992–1993
1st Year Undergraduate Physics Laboratory Demonstrator, ANU	1990
Physics Tutor, Burgmann College, ANU	1988

Outreach:

Citizens Schools after school outreach program, Washington Irving Middle School www.citizenschools.org	Fall 2008
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Research Interests:

Low-mass star formation; Structure and evolution of dense cores
Evolution of protostars; Circumstellar disks and protostellar outflows

Clustered star formation; Interferometric phase correction techniques

Professional Activities:

National Science Foundation Grants Reviewer, 2008–
 Australian Research Council Grants Reviewer (Intreader) 2003–
 Referee, *Astrophysical Journal*, *Publications Astronomical Society of Australia*,
Astronomy & Astrophysics, *Monthly Notices of the Royal Astronomical Society*
Astrophysics and Space Sciences
 Referee, James Clerk Maxwell Telescope (occasional), NRAO Green Bank Telescope (2005-07)
 Scientific Organizing Committee Co-Chair, IAU Symposium 221, Australia July 2003
 Organiser, SAO Radio & Geoastronomy Division Lunch Talks, 2002–03
 Member, Australia Telescope Users Committee 1998
 Organiser, ATNF Symposium Series, 1998

Awards:

SAO Predoctoral Fellowship, 1994 – 1998
 Mt Stromlo Observatory Summer Vacation Scholarship, 1988

Professional Societies:

International Astronomical Union
 American Astronomical Society

Grants as Principal Investigator:

2008–11	“The Birth and Evolution of Protoplanetary Disks” NASA Origins of Solar Systems	\$225,427
2008	“The Initial Conditions for Star Formation in Clusters” NSF Research in Undergraduate Institutions program (RUI) To support summer collaborative visit of Dr. C. De Vries (Cal State Stanislaus)	\$15,933
2008–11	“Lonely Cores: Star Formation in Isolation” Spitzer Space Telescope GO Cycle 5 (71.6 hrs)	\$277,665
2008	AAS International Travel Grant To attend <i>Early Phases of Star Formation 2008</i>	\$900
2007–10	“The Initial Conditions for Star Formation in Clusters” NSF Astronomy & Astrophysics Research Grants	\$244,060
2007–09	“A NICMOS Survey for Proplyds in the RCW 38 Massive Embedded Cluster” Hubble Space Telescope Cycle 16 (10 orbits)	\$50,506
2006–09	“Going Long: Studying the Initial Conditions for Brown Dwarfs and Low-Mass Stars with Spitzer at 160 microns”, Spitzer Space Telescope GO Cycle 3 (47.3 hrs)	\$147,528
2006	AAS International Travel Grant To attend <i>Disks, Winds and Jets – From Planets to Quasars</i>	\$2,200
2001	AAS International Travel Grant To attend <i>The Origins of Stars and Planets: The VLT View</i>	\$300

Observing Experience:

I have been awarded observing time on the following major facilities:

Anglo-Australian Telescope (AAT), Atacama Pathfinder Experiment (APEX), Australia Telescope Compact Array (ATNF:ATCA), Berkeley-Maryland-Illinois Array (BIMA), Caltech Submillimeter Observatory (CSO), Chandra X-ray Observatory (CXO), FCRAO 14-m telescope, Green Bank Telescope (GBT), Hubble

Space Telescope (HST), IRAM 30-m telescope, James Clerk Maxwell Telescope (JCMT), Mopra radio-telescope (ATNF), New-Technology Telescope (ESO:NTT) NRAO 140ft radio-telescope, NRAO/ARO 12-m radio-telescope, Parkes radio-telescope (ATNF), Spitzer Space Telescope (SST), Submillimeter Array (SMA), Swedish-ESO Submillimetre Telescope (SEST), Very Large Array (VLA), Very Large Telescope (ESO:VLT)

Courses Attended:

NASA Center for Astronomical Education Workshop, *Improving the Introductory Astronomy Survey Course for Non-Science Majors through Active Learning: A Tier I (Introductory) Workshop*, 2009
 IRAM Millimetre Interferometry School 2002
 INAOE Summer School “Millimetric & Sub-millimetric Astronomy” 1996
 NRAO VLA Synthesis Imaging Summer School 1995
 International Space University Summer Program 1991, 1993 (www.isunet.edu)

Colloquia and Conference Presentations:

April 2008 Colloquium, Australia Telescope National Facility, Sydney, Australia
 April 2008 Colloquium, University of Exeter, UK
 January 2008 AAS 211th Meeting, oral presentation “The Initial Conditions for Star Formation in Clusters”
 September 2007 SMA Advisory Committee Meeting, Cambridge MA. Presentation on “Low Mass Star Formation Studies with the SMA”
 April 2007 Colloquium, European Southern Observatory, Garching bei München, Germany
 April 2007 Colloquium, Max-Planck-Institut für Astronomie, Heidelberg, Germany
 December 2006 Conference *Disks, Winds and Jets – From Planets to Quasars*, Canberra, Australia
 August 2006 Conference *The Early Stages of Star Formation (EPoS 2006)*, Ringberg, Germany
 July 2005 Conference *Star Formation in the Era of the Three Great Observatories*, Cambridge, USA
 December 2004 Colloquium, ETH Zürich Institute for Astronomy, Switzerland
 November 2004 Conference *Spitzer Space Telescope: New Views of the Cosmos*, Pasadena, USA
 July 2003 IAU Symposium 221 *Star Formation at High Angular Resolution*, Sydney, Australia
 February 2002 Colloquium, CfA Radio & Geoastronomy Division, Cambridge USA
 November 2001 Workshop *Millimetre Science with the Upgraded Australia Telescope*, Univ. Melbourne, Australia. “Star Formation Studies with the mm ATCA” (Invited review)
 April 2001 Conference *The Origins of Stars and Planets: The VLT View*, ESO Garching, Germany
 May 1998 Colloquium, Anglo-Australian Observatory/Australia Telescope National Facility, Sydney, Australia
 May 1998 Colloquium, Mt Stromlo & Siding Spring Observatories, Canberra Australia
 May 1994 Fourth Haystack Observatory Conference, *Clouds, Cores, and Low Mass Stars*, Haystack Observatory, USA
 April 1993 Anglo-Australian Telescope Board Symposium Scientific Session, Canberra, Australia

Professional Referees: Dr Philip Myers,
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Professor Neal J. Evans II,
Department of Astronomy,
University of Texas at Austin,
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Dr David Wilner,
Harvard-Smithsonian Center for Astrophysics,
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Cambridge, MA 02138, USA.
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Others available upon request.

Publications – Tyler Leonard BOURKE

Submitted to Refereed Journals:

6. *Large-Scale CO Maps of the Lupus Molecular Cloud Complex*
Tothill, N.F.H., Löhr, A., Parshley, S.C., Stark, A.A., Lane, A.P., Harnett, J.I., Wright, G.A., Walker, C.K., **Bourke, T.L.**, & Myers, P.C., submitted to *The Astrophysical Journal Supplement Series* (4/2009)
5. *Mult-Dimensional Chemical Modelling of Young Stellar Objects: II: Irradiated Outflow Walls in a High-Mass Star Forming Region*
Bruderer, S., Benz, A.O., Doty, S.D., van Dishoeck, E.F., & **Bourke, T.L.**, submitted to *The Astrophysical Journal* (3/2009)
4. *Rotation and Outflow motions in the very low-mass Class 0 protostellar system HH 211 at subarcsecond resolution*
Lee, C.-F., Hirano, N., Palau, A., Ho, P.T.P., **Bourke, T.L.**, Zhang, Q., Shang, H., submitted to *The Astrophysical Journal* (2/2009)
3. *The Spitzer survey of interstellar clouds in the Gould Belt. II. The Cepheus Flare observed with IRAC and MIPS*
Kirk, J.M., Ward-Thompson, D., Di Francesco, J. **Bourke, T.L.**, and 13 others, submitted to *The Astrophysical Journal* (2/2009)
2. *The Spitzer c2d Survey of Nearby Dense Cores: VI. The Protostars of L1221*
Young, C.H., **Bourke, T.L.**, Dunham, M.M., Evans, N.J. II, Jørgensen, J.K., Shirley, Y.L., Young, K.E., De Vries, C., Claussen, M.J., & Popa, V., submitted to *The Astrophysical Journal* (11/2008)
1. *A VLT/NACO Study of Star Formation in the Massive Embedded Cluster RCW 38*
De Rose, K.L., **Bourke, T.L.**, Gutermuth, R., Wolk, S., Megeath, S.T., Alves, J., & Nürnberger, D., submitted to *The Astronomical Journal* (4/2008)

Published in Refereed Journals (or in press):

70. *Linking pre- and proto-stellar objects in the intermediate/high-mass star forming region IRAS 05345+3157*
Fontani, F., Zhang, Q., Caselli, P., **Bourke, T.L.**, *Astronomy & Astrophysics*, (astro-ph/0903.0159)
69. *Large grains in disks around young stars: ATCA observations of WW Cha, RU Lup, and CS Cha*
Lommen, D., Maddison, S.T., Wright, C.M., van Dishoeck, E.F., **Bourke, T.L.**, *A&A*, (astro-ph/0812.3849)
68. *The Spitzer c2d Survey of Nearby Dense Cores: V. Discovery of a VeLLO in the “Starless” Dense Core L328*
Lee, C.W., **Bourke, T.L.**, Myers, P.C., Dunham, M., Evans, N., Lee, Y., Huard, T., Wu, J., Gutermuth, R., Kim, M.-R., Kang, H.W., *ApJ*, (astro-ph/0812.2012)
67. *Spitzer Observations of L429: A Near-Collapse or Collapsing Starless Core*
Stutz, A.M., **Bourke, T.L.**, Rieke, G.H., Bieging, J.H., Misselt, K.A., Myer, P.C., Shirley, Y.L., 2009, *ApJ Letters*, 690, 35-38
66. *IRMA as a Potential Phase Correction Instrument: Results from the SMA Test Campaign*
Naylor, D.A., Phillips, R.R., Di Francesco, J., **Bourke, T.L.**, Querel, R.R., Jones, S.C., 2008, *International Journal of Infrared and Millimeter Waves*, 29 (12), 1196-1204
65. *SMA CO (2-1) Observations of CG 30: a Protostellar Binary System with a High-Velocity Quadrupolar Molecular Outflow*
Chen, X., **Bourke, T.L.**, Launhardt, R., Henning, T., 2008, *ApJ Letters*, 686, L107-L110
64. *SiO shocks of the protostellar jet HH 212: A search for jet rotation*
Lee, C.-F., Ho, P.T.P., **Bourke, T.L.**, Hirano, N., Shang, H., & Zhang, Q., 2008, *ApJ*, 685, 1026-1032

63. *Identifying the Low Luminosity Population of Embedded Protostars in the c2d Observations of Clouds and Cores*
Dunham, M.M., Crapsi, A., Evans, N.J. II, **Bourke, T.L.**, Huard, T.L., Myers, P.C., & Kauffmann, J., 2008, ApJ Supp. Series, 179, 249-282
62. *An interferometric study of IRAS 16293-2422: small scale organic chemistry*
Bisschop, S.E., Jørgensen, J.K., **Bourke, T.L.**, Bottinelli, S., & van Dishoeck, E.F., A&A, 2008, 488, 959-968
61. *MAMBO Mapping of Spitzer c2d Small Clouds and Cores*
Kauffmann, J., Bertoldi, F., **Bourke, T.L.**, Evans, N.J., II, & Lee, C.W., 2008, A&A, 487, 993-1017
60. *ATCA and Spitzer Observations of the Binary Protostellar Systems CG 30 and BHR 71*
Chen, X., Launhardt, R., **Bourke, T.L.**, Henning, T., & Barnes, P.J., 2008, ApJ, 683, 862-875
59. *The Spitzer Survey of Interstellar Clouds in Gould's Belt. I. IC 5146 Observed with IRAC and MIPS*
Harvey, P.M., Huard, T.L., Jørgensen, J.K., Gutermuth, R.A., Mamajek, E.E., **Bourke, T.L.**, Merin, B., Cieza, L., Brooke, T., Chapman, N., Allen, L.E., Evans II, N.J., & Kirk, J.M., 2008, ApJ, 680, 495-516
58. *The CO Molecular Outflows of IRAS 16293-2422 Probed by the Submillimeter Array*
Yeh, S.C.C., Hirano, N., **Bourke, T.L.**, Ho, P.T.P., Lee, C.-F., Ohashi, N., & Takakuwa, S., 2008, ApJ, 675, 454-463
57. *The Spitzer Gould Belt Survey of Large Nearby Interstellar Clouds: Discovery of a Serpens-like Embedded Cluster in the Serpens-Aquila Rift*
Gutermuth, R.A., **Bourke, T.L.**, Allen, L.E., Myers, P.C., Megeath, S.T., Matthews, B., Jørgensen, J.K., Di Francesco, J., Ward-Thompson, D., Huard, T., Brooke, T., Dunham, M., Cieza, L., Harvey, P., & Chapman, N., 2008, ApJL, 673, L151-L154
56. *X-ray and IR Point Source Identification and Characteristics in the Embedded, Massive Star-Forming Region RCW 108*
Wolk, S.J., Spitzbart, B.D., **Bourke, T.L.**, Gutermuth, R.A., Vigil, M., & Comerón, F., 2008, AJ, 135, 693-721
55. *Highly deuterated pre-stellar cores in a high-mass star formation region*
Fontani, F., Caselli, P., **Bourke, T.L.**, Cesaroni, R., & Brand, J., 2008, A&A, 477, L45-48
54. *Molecular Line Observations of the Small Protostellar Group L1251B*
Lee, J.-E., Di Francesco, J., **Bourke, T.L.**, Evans, N.J. II, & Wu, J., 2007, ApJ, 671, 1748-1765
53. *Submillimeter Arcsecond-Resolution Mapping of the Highly Collimated Protostellar Jet HH 211*
Lee, C.-F., Ho, P.T.P., Palau, A., Hirano, N., **Bourke, T.L.**, Shang, H., & Zhang, Q., 2007, ApJ, 670, 1188-1197
52. *Energetic radiation and the sulfur chemistry of protostellar envelopes: Submillimeter interferometry of AFGL 2591*
Benz, A.O., Stäuber, P., **Bourke, T.L.**, van der Tak, F.F.S., van Dishoeck, E.F., & Jørgensen, J.K., 2007, A&A, 475, 549-558
51. *The Spitzer c2d Survey of Large, Nearby, Interstellar Clouds: IV. Lupus observed with MIPS*
Chapman, N.L., et al. (25 co-authors), 2007, ApJ, 667, 288-302
50. *The Detection and Characterization of cm Radio Continuum Emission from the Low-mass Protostar L1014-IRS*
Shirley, Y.L., Claussen, M.J., **Bourke, T.L.**, Young, C.H., & Blake, G.A., 2007, ApJ, 667, 329-339
49. *AST/RO $^{13}\text{CO}(J=2\rightarrow 1)$ and $^{12}\text{CO}(J=4\rightarrow 3)$ Mapping of Spitzer c2d Small Clouds and Cores*
Löhr, A., **Bourke, T.L.**, Stark, A.A., Lane, A.P., Myers, P.C., Parshley, S.C., & Tothill, N.F.H., 2007, ApJS, 171, 478-492

48. *The Spitzer c2d Survey of Large, Nearby, Interstellar Clouds: VI. Perseus observed with MIPS*
Rebull, L.M., et al. (23 co-authors), 2007, ApJS, 171, 447-477
47. *Arcsecond-Resolution Submillimeter HCN Imaging of the Binary Protostar IRAS 16293-2422*
Takakuwa, S., Ohashi, N., **Bourke, T.L.**, et al., 2007, ApJ, 662, 431-442
46. *HH 212: SMA observations of a remarkable protostellar jet*
Lee, C.-F., Ho, P.T.P., Beuther, H., **Bourke, T.L.**, Hirano, N., Shang, H., & Zhang, Q., 2007, ApJ, 659, 499-511
45. *PROSAC: A Submillimeter Array Survey of Low-Mass Protostars. I. Overview of program: Envelopes, Disks, Outflows, and Hot Cores*
Jørgensen, J.K., **Bourke, T.L.**, et al. (and 9 others), 2007, ApJ, 659, 479-498
44. *SHARC-II mapping of Spitzer c2d Small Clouds and Cores*
Wu, J., Dunham, M.M., Evans, N.J. II, **Bourke, T.L.**, & Young, C.H., 2007, AJ, 133, 1560-1584
43. *The Spitzer c2d Survey of Large, Nearby, Interstellar Clouds. V. Chamaeleon II Observed with IRAC*
Porras, A., et al. (22 co-authors), 2007, ApJ, 656, 493-504
42. *Investigating grain growth in disks around southern T Tauri stars at millimetre wavelengths*
Lommen, D., Wright, C.M., Maddison, S.T., Jørgensen, J.K., **Bourke, T.L.**, et al. (and 5 others), 2007, A&A, 462, 211-220
41. *A Large Scale Survey of NGC 1333*
Walsh, A.J., Myers, P.C., Di Francesco, J., Mohanty, S., **Bourke, T.L.**, Gutermuth, R., & Wilner, D., 2007, ApJ, 655, 958-972
40. *The Spitzer c2d Survey of Nearby Dense Cores: IV. Revealing the Embedded Cluster in B59*
Brooke, T.Y., Huard, T.L., **Bourke, T.L.**, et al. (and 25 others), 2007, ApJ, 655, 364-374
39. *The Spitzer c2d Survey of Nearby Dense Cores: I. First Direct Detection of the Embedded Source in IRAM 04191+1522*
Dunham, M.M., Evans, N.J., II, **Bourke, T.L.**, et al. (and 9 others), 2006, ApJ, 651, 945-959
38. *The Spitzer c2d Survey of Nearby Dense Cores: II. Discovery of a Low Luminosity Object in the 'Evolved Starless Core' L1521F*
Bourke, T.L., et al. (and 14 others), 2006, ApJL, 649, L37-L40
37. *SCUBA Mapping of Spitzer c2d Small Clouds and Cores*
Young, C.H., **Bourke, T.L.**, et al. (and 6 others), 2006, AJ, 132, 1998-2013
36. *The Spitzer c2d Survey of Nearby Dense Cores: III. Low Mass Star Formation in a Small Group, L1251B*
Lee, J.-E., Di Francesco, J., Lai, S.-P., **Bourke, T.L.**, et al. (and 7 others), 2006, ApJ, 648, 491-508
35. *X-ray and IR Point Source Identification and Characteristics in the Embedded, Massive Star-Forming Region RCW 38*
Wolk, S.J., Spitzbart, B.D., **Bourke, T.L.**, & Alves, J., 2006, AJ, 132, 1100-1125
34. *The Spitzer c2d Survey of Large, Nearby, Interstellar Clouds. III. Perseus Observed with IRAC*
Jørgensen, J.K., et al. (21 co-authors), 2006, ApJ, 645, 1246-1263
33. *Deep Near-Infrared Observations of L1014: Revealing the nature of the core and its embedded source*
Huard, T.L., Myers, P.C., Murphy, D.C., Crews, L.J., Lada, C.J., **Bourke, T.L.**, Crapsi, A., Evans, N.J. II, Mc Carthy, D.W. Jnr., & Kulesa, C., 2006, ApJ, 640, 391-401
32. *Infall and Outflow Around the HH 212 Protostellar System*
Lee, C.-F., Ho, P.T.P., Beuther, H., **Bourke, T.L.**, Zhang, Q., Hirano, N., & Shang, H., 2006, ApJ, 639, 292-302

31. *Observations of Global and Local Infall in NGC 1333*
Walsh, A.J., **Bourke, T.L.**, & Myers, P.C., 2006, ApJ, 637, 860-868
30. *Submillimeter Emission from the Hot Molecular Jet HH 211*
Palau, A., Ho, P.T.P., Zhang, Q., Estalella, R., Hirano, N., Shang, H., Lee, C.-F., **Bourke, T.L.**, Beuther, H., & Kuan, Y.-J., 2006, ApJL, 636, L140-143
29. *CO J=6-5 Observations of TW Hya with the SMA*
Qi, C., Wilner, D.J., Calvet, N. **Bourke, T.L.**, Blake, G.A., Hogerheijde, M., Ho, P.T.P., & Bergin, E., 2006, ApJL, 636, L157-160
28. *Discovery of a Low Mass Bipolar Molecular Outflow from L1014-IRS with the Submillimeter Array*
Bourke, T.L., Crapsi, A., Myers, P.C., Evans, N.J. II, Wilner, D.J., Huard, T.L., Jørgensen, J.K., & Young, C.H., 2005, ApJL, 633, L129-132
27. *Probing the inner 200 AU of low-mass protostars with the Submillimeter Array: Dust and organic molecules in NGC 1333-IRAS2A*
Jørgensen, J.K., **Bourke, T.L.**, Myers, P.C., Schöier, F.L., van Dishoeck, E.F., & Wilner, D.J., 2005, ApJ, 632, 973-981
26. *Dynamical and chemical properties of the ‘starless’ core L1014*
Crapsi, A., De Vries, C.H., Huard, T.L., Lee, J.-E., Myers, P.C., Ridge, N.A., **Bourke, T.L.**, Evans, N.J. II, Jørgensen, J.K., Kauffmann, J., Lee, C.W., Shirley, Y.L., & Young, C.H., 2005, A&A, 439, 1023-1032
25. *Organic Molecules in the Hot Corinos and Circumstellar Disks of IRAS 16293-2422*
Huang, H.-C., Kuan, Y.-J., Charnley, S.B., Hirano, N., Takakuwa, S., & **Bourke, T.L.**, 2005, Advances in Space Research, 36(2), 146-155 (astro-ph/0504271)
24. *The Spitzer c2d Survey of Large, Nearby, Interstellar Clouds. I. Chamaeleon II Observed with MIPS*
Young, K.E., et al. (22 co-authors), 2005, ApJ, 628, 283-297
23. *On the Identification of High Mass Star Forming Regions using IRAS: Contamination by Low-Mass Protostars*
Bourke, T.L., Hyland, A.R., & Robinson, G., 2005, ApJ, 625, 883-890
22. *Probing the evolutionary status of starless cores through N_2H^+ and N_2D^+ observations*
Crapsi, A., Caselli, P., Walmsley, C.M., Myers, P.C., Tafalla, M., Lee, C.W., & **Bourke, T.L.**, 2005, ApJ, 619, 379-406
21. *Organic Molecules in Low-Mass Protostellar Cores: Submillimeter Imaging of IRAS 16293-2422*
Kuan, Y.-J., Huang, H.-C., Charnley, S.B., Hirano, N., Takakuwa, S., Wilner, D.J., Liu, S.-Y., Ohashi, N., **Bourke, T.L.**, Qi, C., & Zhang, Q., 2004, ApJL, 616, 47-50
20. *Submillimeter Array Observations of L1551 IRS 5 in CS ($J=7-6$)*
Takakuwa, S., Ohashi, N., Ho, P.T.P., Qi, C., Wilner, D.J., Zhang, Q., **Bourke, T.L.**, Hirano, N., Choi, M., & Yang, J., 2004, ApJL, 616, 35-38
19. *Imaging the Disk around TW Hya with the Submillimeter Array*
Qi, C., Ho, P.T.P., Wilner, D.J., Takakuwa, S., Hirano, N., Ohashi, N., **Bourke, T.L.**, Zhang, Q., Blake, G.A., Hogerheijde, M., Saito, M., Choi, M., & Yang, J., 2004, ApJL, 616, 7-10
18. *A ‘starless’ core that isn’t: detection of a source in the L1014 dense core with the Spitzer Space Telescope*
Young, C.H., et al. (28 co-authors), 2004, ApJS, 154, 396-401
17. *A new look at stellar outflows: Spitzer observations of the Herbig-Haro 46/47 system*
Noriega-Crespo, A., et al. (13 co-authors), 2004, ApJS, 154, 352-358

16. *Observations of L1521F: A highly evolved starless core*
Crapsi, A., Caselli, P., Walmsley, C.M., Tafalla, M., Lee, C.W., **Bourke, T.L.**, & Myers, P.C., 2004, A&A, 420, 957-974
15. *Laboratory and radio-astronomical spectroscopy of the hyperfine structure of N_2D^+*
Dore, L., Caselli, P., Beninati, S., **Bourke, T.L.**, Myers, P.C., & Cazoli, G. 2004, A&A, 413, 1177-1181
14. *Disks around the Young Stars TW Hya and HD 100546 Imaged at 3.4 Millimeters with the Australia Telescope Compact Array*
Wilner, D.J., **Bourke, T.L.**, Wright, C.M., Jørgensen, J.K., van Dishoeck, E.F., & Wong, T. 2003, ApJ, 596, 597-602
13. *From Molecular Cores to Planet-forming Disks: A SIRTf Legacy Program*
Evans, N.J., II, et al. (17 co-authors), 2003, PASP, 115, 965-980
12. *Discovery of Nonthermal X-Ray Emission from the Embedded Massive Star-forming Region RCW 38*
Wolk, S.J., **Bourke, T.L.**, Smith, R.K., Spitzbart, B., & Alves, J., 2002, ApJL, 580, L161-165
11. *Methanol and silicon monoxide observations toward bipolar outflows associated with Class 0 objects*
Garay, G., Mardones, D., Rodríguez, L.F., Caselli, P., & **Bourke, T.L.**, 2002, ApJ, 567, 980-998
10. *IRAS 11590-6452 in BHR 71 – a binary protostellar system?*
Bourke, T.L., 2001, ApJL, 554, L91-94
9. *New OH Zeeman measurements of magnetic field strengths in molecular clouds*
Bourke, T.L., Myers, P.C., Robinson, G., & Hyland, A.R., 2001, ApJ, 554, 916-932
8. *A search for water masers in the gravitationally lensed quasars H1413+117 and MG0414+0534*
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7. *Mid-infrared imaging and spectroscopy of the southern HII region RCW 38*
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