

CURRICULUM VITAE

Name: ANDREW RUSSELL TAYLOR
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Citizenship: Canadian
Date of Birth: 2 April 1953

EDUCATION

1978 – 1982 University of British Columbia
Degree: Ph.D.
Field of study: Physics (radio astronomy)
1976 – 1978 University of British Columbia
Degree: M.Sc.
Field of study: Physics (radio astronomy)
1972 – 1976 University of Western Ontario
Degree: Hon. B.Sc.
Field of study: Astronomy, Physics

EMPLOYMENT

Oct 2009 – present Director,
Institute for Space Imaging Science
July 2005 – present Head
Department of Physics and Astronomy
University of Calgary
Calgary, Canada
July 1996 – present Professor
Department of Physics and Astronomy
University of Calgary
Calgary, Canada
July 1990 – July 1996 Associate Professor (URF)
Department of Physics and Astronomy
University of Calgary
Calgary, Canada
August 1987 – July 1990 Assistant Professor (URF)
Department of Physics and Astronomy
University of Calgary
Calgary, Canada
January 1987 – August 1987 Research Associate

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|------------------------------|---|
| January 1985 –December 1986 | Nuffield Radio Astronomy Laboratories University of Manchester Manchester, England Research Associate Kapteyn Astronomical Institute University of Groningen Groningen, The Netherlands |
| December 1982 –December 1984 | Postdoctoral Fellow (NSERC) Department of Astronomy University of Toronto Toronto, Canada |

PROFESSIONAL SERVICE AND ACTIVITIES

Service on Advisory and Policy-making Bodies

President: Division X (Radio Astronomy) International Astronomical Union (2009 -)

Vice-chair Square Kilometre Array Science and Engineering Committee (2010 -)

Member: U.S. National Radio Astronomy Observatory, Expanded Very Large Array Proposal Selection Committee (2008 -)

Member: Square Kilometre Array Science and Engineering Committee (2008 - 2010)

Member: Board of Directors, European Commission PrepSKA Project (2008 -)

Vice-President: Division X (Radio Astronomy) International Astronomical Union (2006 - 09)

Member: External Review Panel, Department of Astronomy, University of Western Ontario (2008)

Chair: U.S. National Astronomy and Ionospheric Center Visiting Committee (2007)

Member: U.S. National Astronomy and Ionospheric Center Visiting Committee (2004 – 2006)

Member: Board of Management, Association of Canadian Universities for Research in Astronomy (2005 –)

Chair: Board of Directors, Canadian SKA Consortium (2004 -)

Chair: Canadian SKA Steering Committee (2004 - 2005)

Member: External Review Panel, Department of Astronomy, University of Toronto (2004)

Member: International Square Kilometre Array Steering Committee (2003 - 2008)

Chair: International Square Kilometre Array Science Advisory Committee (2000 – 2002)

Member: U.S. National Radio Astronomy Observatory EVLA Advisory Panel (2001 - 2004)

Co-Chair: Canadian Coalition for Astronomy (2000 - 2003)

Executive Sec. International Square Kilometre Array Steering Committee (1999 - 2003)

Past-President: Canadian Astronomical Society (2002 - 2004)

- President: Canadian Astronomical Society (2000 - 2002)
- Vice-President: Canadian Astronomical Society. (1996 – 2000)
- Member: Peer Review Committee for the Herzberg Institute of Astrophysics (1998)
- Member: Canadian Space Agency, Space Program Overview Committee (1997 -)
- Chair: Users' Committee for the Dominion Radio Astronomy Observatory (1997-1998)
- Chair: Space Astronomy Sub-group of the Canadian Space Agency Long-term Plan III task force. (1997)
- Member: Working Group on Science and Exploration for the Canadian Space Agency Long Term Space Plan III Task Force (LTSP III). (1997)
- Chair: Joint Subcommittee for Space Astronomy. (1996 –1998)
- Member: National Research Council Planning Committee for A New National Radio Astronomy Facility. (1994 –1996)
- Chair: Radio Astronomy Committee of the Canadian Astronomical Society. (1993 – 1996)
- Member: International Science Council for the Japanese *VSOP* Space-VLBI mission. (1992 –1995)
- Member: Advisory Board for the National Research Council, Herzberg Institute of Astrophysics (1992 –1995).
- Member: U.S. National Radio Astronomy Observatory Users' Committee. (1991–1994)
- Member: Board of Directors of the Canadian Astronomical Society. (1991 –1994)
- Member: Observing Priorities committee, Dominion Radio Astrophysical Observatory. (1988 –)
- Member: Steering Committee for the Institute of Space and Terrestrial Sciences Space Geodynamics Laboratory, York University. (1990 –)
- Member: Radio Astronomy Committee of the Canadian Astronomical Society (1989 - 1992)
- Member: National Research Council committee on the Future of the Algonquin Radio Observatory. (1988 - 1990)

I serve as the Canadian ALMA Software Manager for the Canadian component of the international software development for astronomical use of the Atacama Large Millimetre Array. Calgary serves as the Canadian software development centre under a CFI grant. Other software development centres are at NRAO and ESO.

I am Principle Investigator of the International Galactic Plane Survey, a consortium of over 60 Canadian and international scientists formed to carry out a coordinated project of high resolution imaging of the interstellar medium over the disk of our Galaxy. In that capacity I also serve as the chair of both the management committee for the Canadian part of the project (the Canadian Galactic Plane Survey) and the international project Steering Committee.

I am chair of an international consortium, 31 scientists from Australia, Canada, US and Europe and India to carry out a large-scale spectropolarimetric all-sky survey project with the Arecibo radio telescope. This project has been granted 1600 hours of observing time over the next four years.

I served as an observing proposal referee for the U.S. National Radio Astronomy Observatory, Very Large Array (1993 – 1995) and (1999 – 2002).

I am chair of an international consortium, 23 scientists from Canada, US and Europe and India to develop a large-scale polarimetric all-sky survey project with the Arecibo radio telescope. This project has been granted 1600 hours of observing time over the next five years.

I am principle investigator of collaboration between Canada and Europe to secure ground-based observations of polarized radio emission as part of the ESA Planck Cosmic Microwave Background space mission. This project will produce the most sensitive, high-resolution images of the Galactic foregrounds for deconvolution of the CMB emission.

Organizational Committees:

- Chair: Organizing Committee, SKA Forum 2011, Banff, Canada, July 2011
- Member: Scientific Organizing Committee, 11th Asia-Pacific Regional Meeting of the International Astronomical Union, Thailand 2011
- Member: Scientific Organizing Committee, 10th Asia-Pacific Regional Meeting of the International Astronomical Union, Kunming, China 2008
- Chair: Local Organizing Committee for American Astronomical Society meeting: Calgary, 2006
- Chair: Local Organizing Committee for Canadian Astronomical Society meeting: Calgary 2006
- Member: Scientific Organizing Committee for IAU Symposium "Magnetic fields from small to large scales: observations confront theory", Prague, 2006.
- Member: Scientific Organizing Committee for the 9th Asian Pacific Region Meeting of the International Astronomical Union, Bali 2005.
- Member: Scientific Organizing Committee for the conference "The Magnetized Interstellar Medium", Antalya, Turkey 2003
- co-chair: Organizing Committee for one-day Session "Large and New Facilities: Science and Development" Asian-Pacific Meeting of the International Astronomical Union, Tokyo, 2002.
- Member: Scientific Organizing Committee for the conference "ALMA and Prospects for Radio Astronomy in the 21st Century", Tokyo, 2002.
- Member: Scientific Organizing Committee for the 8th Asian Pacific Region Meeting of the International Astronomical Union, Tokyo, 2002.
- Chair: Scientific Organizing Committee for the conference "New Frontiers in Astrophysics: The Square Kilometre Array", Bologna, 2002.
- Chair: Scientific Organizing Committee for the conference "Seeing Through the Dust: The Detection of HI and the Exploration of the ISM of Galaxies", Penticton, 2001.
- Member: Scientific Organizing Committee for the conference "The SKA: Defining the Future", Berkeley, 2001
- Member: Scientific Organizing Committee for the conference "Scientific Imperatives at cm and m Wavelengths", Amsterdam, 1999.
- Co-Chair: Scientific Organizing Committee for the conference "New Perspectives on the Interstellar Medium", Naramata, 1998
- Chair: Scientific Organizing Committee for the conference "Science with the Square Kilometre Array, Calgary, 1998
- Member: Scientific Organizing Committee for the conference "High Sensitivity Radio Astronomy", Manchester, 1996
- Chair: Scientific Organizing Committee for the conference "Radio Emission from the Stars and the Sun", Barcelona, 1995

- Chair: Galactic Astronomy Working Group for the NRAO Very Large Array Upgrade Workshop, Socorro, 1995.
- Chair: Scientific Organizing Committee for the conference “Radio Astronomy: Visions for the 21st Century, Penticton, 1994.
- Member: Scientific Organizing Committee for the workshop “The Future of Millimetre/Submillimeter Interferometry in Canada”, Hamilton, 1992.

EXTERNAL RESEARCH FUNDING SINCE 2000

| Type | Source | Duration | Amount |
|--------------------------------------|---------------------------|-----------|-------------|
| Network Enabled Platforms | CANARIE | 2009-2011 | \$2,056,881 |
| Special Research Opportunities | National Research Council | 2009-2012 | \$1,250,000 |
| Contract | National Research Council | 2007-2012 | \$800,000 |
| Discovery Grant | NSERC | 2010-2015 | \$300,000 |
| Individual Research Grant | NSERC | 2005-2010 | \$298,000 |
| Special Research Opportunities | NSERC | 2006-2009 | \$818,125 |
| International Access | CFI | 2003-2009 | \$7,926,452 |
| CSA/NSERC Partnership | CSA/NSERC | 2004-2005 | \$67,500 |
| Contract | National Research Council | 2005-2005 | \$56,004 |
| Individual Research Grant | NSERC | 2000-2005 | \$300,000 |
| Collaborative Research Opportunities | NSERC | 2001-2004 | \$764,880 |
| Contract Space VLBI | Canadian Space Agency | 2002-2004 | \$884,289 |
| Contract Space VLBI | Canadian Space Agency | 2002-2004 | \$60,000 |
| Contract | International SKA Project | 2000-2003 | \$162,000 |

TRAINING OF HIGHLY QUALIFIED PERSONNEL

Graduate Students

| Name | years | Degree | Thesis Title |
|----------------------------|-----------|--------|--|
| Sukhpreet Guram | 2007 - | Ph.D. | GALFACTS |
| Lydia Mitchell | 2007 - | M.Sc. | Polarized Emission from Disk Galaxies |
| Julie Grant | 2006 - | Ph.D. | The mJy Polarized Source Population |
| Sukhpreet Guram | 2005 - 07 | M.Sc. | Multi-beam Clean for Focal Plane Arrays |
| Julie Grant | 2004 – 06 | M.Sc. | Faint Polarized Sources in ELAIS N1 |
| Christy Bredeson | 2004 – 06 | M.Sc. | Arecibo Polarization Imaging |
| Kevin Douglas | 1999 – 05 | Ph.D. | Diffuse Molecular Gas in the Interstellar Medium |
| Simon Strasser | 2000 – 02 | M.Sc. | The Temperature Structure of Atomic Hydrogen Gas in the Galaxy |
| Jo-Anne Brown [†] | 1996 – 02 | Ph.D. | The Structure of the Galactic Magnetic Field |
| Stephanie Wilder | 1999 – 00 | M.Sc. | Variable Radio Sources in the Galaxy |
| Chris Butenhoff | 1994 – 97 | M.Sc. | Compact Sources in the Galaxy |

| Name | years | Degree | Thesis Title |
|---------------------|--------------|---------------|--|
| Magdalen Normandeau | 1991 – 96 | Ph.D. | Galactic Star Formation and the Interstellar Medium |
| Brad Wallace | 1991 – 96 | Ph.D. | Supernova Remnants and the Interstellar Medium |
| Brenda Matthews | 1994 – 96 | M.Sc. | An Ancient Supernova Remnant |
| Harold Kenny | 1989 – 95 | Ph.D. | Symbiotic Star Radio Imaging |
| Grant Gussie | 1987 – 93 | Ph.D. | Neutral Envelopes of Planetary Nebulae |
| Sean Dougherty | 1988 – 93 | Ph.D. | Disks of Be Stars |
| Brad Wallace | 1989 – 91 | M.Sc. | Supernova Remnants in the WSRT 327 MHz Galactic Plane survey |
| Harold Kenny | 1987 – 89 | M.Sc. | AG Pegasi: A Multi-Shell Radio Source |

† Awarded the Canadian Astronomical Society Plaskett Medal for the best Astronomy Ph.D. Thesis in Canada

Postdoctoral Fellows and Research Associates

| Name | years | Project |
|------------------|--------------|---|
| Mircea Andreucut | 2010 - | Radio astronomy data processing |
| Pavol Federl | 2010 - | Visualization of multidimensional astronomical data |
| Shannon Jeager | 2010 - | Wide-field polarimetric imaging |
| Arne Grimstrup | 2010 - | Cyber Infrastructure for the SKA |
| Roberto Ricci | 2007 - 2009 | Relationship Between the Phases of the ISM |
| Arne Grimstrup | 2006 - 2009 | ALMA Common Software Development |
| | 2006 - | Astronomical Processing Software Development |
| Joreon Stil | 2000 – 2008 | VLA Galactic Plane Survey |
| Roland Kothes | 2000 – 2008 | Canadian Galactic Plane Survey |
| David Fugate | 2004 – 2006 | ALMA Software Development |
| Gary Li | 2004 – 2006 | AIPS++ Astronomical Processing Software for ALMA |
| Jo-Anne Brown† | 2001 – 2005 | Structure of the Galactic Magnetic Field |
| Chris Brunt | 1999 – 2003 | ISM Structure |
| Richard Gooch | 1999 – 2004 | Astronomical Data Visualization |
| Steve Gibson | 1996 – 2005 | Canadian Galactic Plane Survey |
| Bill Scott | 1997 – 2004 | Space Very Long Baseline Interferometry |
| Beulent Uyaniker | 1999 – 2002 | Polarimetry of the Interstellar Medium |
| Sean Dougherty | 1996 – 2002 | Space Very Long Baseline Interferometry |
| Marta Peracaula | 1997 – 1999 | Polarization of the Interstellar Medium |
| Denise Gabuzda* | 1990 – 1993 | Very Long Baseline Polarimetry |
| Haiqi Chen | 1992 – 1994 | Radio and Optical Properties of Be Stars |

* awarded the Henri Chrétien International Research Award from the American Astronomical Society in 1993 for work carried out under my direction.

† Alberta Ingenuity Fellow

MEMBERSHIP IN PROFESSIONAL SOCIETIES

The Canadian Astronomical Society/Société canadienne d'astronomie

International Astronomical Union

Nederlandse Astronomenclub

PUBLICATIONS

1. Grant, J.K., Taylor, A.R., Stil, J.M., Landecker, T.L., Kothes, R., Ransom, R.R. and Scott, D. 2010, “The DRAO Planck Deep Fields: the polarization properties of radio galaxies at 1.4 GHz”, *Astrophysical Journal*, in press.
2. Landecker, T.L., Reich, W., Reid, R.I., Reich, P., Wolleben, M., Kothes, R., Uyaniker, B., Gray, A.D., Del Rizzo, D., Furst, E., Taylor, A.R. and Wielebinski, R. 2010, “A Survey of Polarized Emission from the Galactic Plane at 1420 MHz with Arcminute Resolution”, *Astronomy and Astrophysics*, in press.
3. Taylor, A.R., Stil, J.M., Sunstrum, C. 2009, “A Rotation Measure Image of the Sky”, *Astrophysical Journal*, 702, 1230 - 1236.
4. Stil, J. M., Wityk, N., Ouyed, R. and Taylor, A.R. 2009, “Three-dimensional Simulations of Magnetized Superbubbles: New Insights into the Importance of MHD Effects on Observed Quantities”, *Astrophysical Journal*, 701, 330-347.
5. Stil, J.M., Krause, M., Beck, R. and Taylor, A.R., 2009, “The Integrated Polarization of Spiral Galaxy Disks”, *Astrophysical Journal*, 693, 1392 – 1403.
6. Dickey, J.M., Strasser, S., Gaensler, B.M., Haverkorn, M., Kavars, D., McClure-Griffiths, N.M., Stil, J. and Taylor, A.R. 2009, “The Outer Disk of the Milky Way Seen in λ 21 cm Absorption”, *Astrophysical Journal*, 693, 1250 – 1260.
7. Johnston, S., Taylor, A.R., Bailes, M. et al. 2008, “Science with ASKAP: The Australian Square Kilometre Array Pathfinder”, *Experimental Astronomy*, 22, pp. 151 – 273.
8. Dodson, R., Fomalont, E.B., Wiik, K., Horiuchi, S., Hirabayashi, H., Edwards, P.G., Murata, Y., Asaki, Y., Moellenbrock, G.A., Scott, W.K., Taylor, A.R., Gurvitz, L.I., Paragi, Z., Frey, S., Shen, Z.-Q., Lovell, J.E.J., Tingay, S., Rioja, M.J., Fodor, S., Lister, M.L., Mosoni, L., Coldwell, G., Piner, B.G. and Yang, J. 2008, “The VSOP 5 GHz Active Galactic Nucleus Survey: V. Imaging Results from the Remaining 140 sources”, *Astrophysical Journal Supplementary Series*, 175, pp. 314 - 355.
9. Johnston, S., Bailes, M., Bartel, N., Bauch, C., Beitenholtz, M., ... Taylor, A.R., ..., 2007, “Science with the Australian Square Kilometre Array Pathfinder”, *Publications of the Astronomical Society of Australia*, 24, pp. 174 – 188.
10. Strasser, S.T., Dickey, J.M., Taylor, A.R., Boothroyd, A.I., Gaensler, B.M., Green, A.J., Kavars, D.W., Lockman, F.J., Martin, P.G., McClure-Griffiths, N.M., Rothwell, T.A. and Stil, J.M. 2007, “Tracking the Outer Spiral Arms of the Galaxy in HI Absorption”, *Astronomical Journal*, 134, 2252 – 2271.
11. Taylor, A.R., Stil, J.M., Grant, J.K., Landecker, T.L., Kothes, R., Ried, R. I., Gray, A.D., Scott, D., Martin, P.G., Boothroyd, A.I., Joncas, G., Lockman, F.J., English, J., Sajina, A. and Bond, R. 2007, “Radio Polarimetry of the ELAIS N1 Field: Polarized Compact Sources”, *Astrophysical Journal*, 666, 201 - 211.
12. Stil, J.M. and Taylor, A.R. 2007, “Polarization Shadows of Extragalactic Sources by the Local Magnetionic Medium”, *Astrophysical Journal*, 663, L21 – L24.
13. Brown, J.C., Haverkorn, M., Gaensler, B. M., Taylor, A. R., Bizunok, N.S., McClure-Griffiths, N.M., Dickey, J.M. and Green, A.J. 2007, “Rotation Measures of Extragalactic Sources Behind the Southern Galactic Plane: New Insights into the Large

- Scale Magnetic Field of the Inner Milky Way”, *Astrophysical Journal*, 663, 258 – 266.
14. Kenny, H.T. and Taylor, A.R. 2007, “Colliding Winds in Symbiotic Binary Systems II: Colliding Winds Geometries and Orbital Motion in the Symbiotic Nova AG Pegasi”, *Astrophysical Journal*, 662, 1231-1244.
 15. Douglas, K.A. and Taylor, A.R. 2007, “Infrared Excess Sources in the Canadian Galactic Plane Survey”, *Astrophysical Journal*, 659, 426.
 16. Stil, J.M., Taylor, A.R., Dickey, J.M., Kavars, D.W., Martin, P.G., Rothwell, T.A., Boothroyd, A.I., Lockman, F.J. and McClure-Griffiths, N.M., 2006 “The VLA Galactic Plane Survey”, *Astronomical Journal*, 132, 1158 - 1176.
 17. Stil, J. M., Lockman, F. J and Taylor, A.R., Dickey, J.M., Kavars D.W., Martin, P.G., Rothwell, T.A., Boothroyd, A.I. and McClure-Griffiths, N.M. 2006, “Compact HI Clouds at High Forbidden Velocities in the VLA Galactic Plane Survey”, *Astrophysical Journal* , 637, 366 - 379.
 18. Klaassen, P.D., Plume, R., Gibson, S.J., Taylor, A.R. & Brunt, C.M., 2005 “CO in HI Self-absorbed Clouds in Perseus”, *Astrophysical Journal*, 631, 1001 – 1009.
 19. Gibson, S. J., Taylor, A. R., Higgs, L. A., Brunt, C. M., & Dewdney, P. E. 2005, “An Automated Method for the Detection and Extraction of H I Self-Absorption in High-Resolution 21cm Line Surveys”, *Astrophysical Journal*, 626, 214 - 232.
 20. Gibson, S. J., Taylor, A. R., Higgs, L. A., Brunt, C. M., & Dewdney, P. E. 2005, “A Self-Absorption Census of Cold H I Clouds in the Canadian Galactic Plane Survey”. *Astrophysical Journal*, 626, 195 - 213.
 21. Kenny, H.T. and Taylor, A.R. 2005, “Colliding Winds in Symbiotic Binary Systems I: Analytic and Numerical Solutions”, *Astrophysical Journal*, 619, 527 - 537.
 22. Horiuchi, S., Fomalont, E.B., Scott, W.K., Taylor, A.R., et. al. 2004, “The VSOP 5 GHz AGN Survey IV: The Angular Size/Brightness Temperature Distribution”, to appear in *Astrophysical Journal*.
 23. Scott, W.K., Fomalont, E.B., Horiuchi, S., ... Taylor, A.R., et. al. 2004, “The VSOP 5 GHz AGN Survey III: Imaging Results for the first 102 Sources”, *Astrophysical Journal Supplements*, 155, 33 – 72.
 24. Lovell, J.E.J., Moellenbrock, G.A., Horiuchi, ... Taylor, A.R., et. al. 2004, “The VSOP 5 GHz AGN Survey II: Data Calibration and Imaging”, *Astrophysical Journal Supplements*, 155, 27 – 31.
 25. Stil, J.M., Taylor, A.R., Martin, P.G., Rothwell, T.A., Dickey, J.M., McClure-Griffiths, N.M. 2004, “GSH 23.0-0.7+117: A Neutral Hydrogen Shell in the Inner Galaxy”, *Astrophysical Journal*, 608, 297.
 26. Strasser, S. and Taylor, A.R. 2004, “1420 MHz Continuum Absorption toward Extragalactic Sources in the Galactic Plane”, *Astrophysical Journal*, 603, 560.
 27. Brown, J.C., Taylor, A.R., Wielebinski, R., and Mueller, P. 2003, “On Large-Scale Magnetic Field Reversals in the Outer Galaxy”, *Astrophysical Journal Letters*, 592, 29 – 32.
 28. Taylor, A.R., et al. 2003, “The Canadian Galactic Plane Survey”, *Astronomical Journal*, 125, 3145 - 3164

29. Brown, J. C., Taylor, A. R., Jackel, B. J. 2003, "Rotation Measures of Compact Sources in the Canadian Galactic Plane Survey", *Astrophysical Journal Supp.*, **155**, 213-223.
30. Eyers, S.P.S., Bode, M.F., Skopal, A., Crocker, M.M., Davis, R.J., Taylor, A.R., Teodorani, M., Errico, L., Vittone, A.A, and Elkin, V.G. 2002, "The symbiotic star CH Cygni - II. The ejecta from the 1998-2000 active phase", *Monthly Not. Roy. astr. Society.* **334**, 526.
31. Brocksopp, C., Bode, M.F., Eyers, S.P.S., Crocker, M. M., Davis, R. J., Taylor, A. R. 2002 "The Central Binary and Surrounding Nebula of the Symbiotic Star V1016 Cygni", *Astrophysical Journal.*, **571**, 947.
32. Brown, J. C. and Taylor, A. R., 2002, "The Structure of the Magnetic Field in the Outer Galaxy from Rotation Measure Observations through the Disk", *Astrophysical Journal*, 563, 31.
33. Crocker, M. M., Davis, R. J., Eyres, S. P. S., Bode, M. F., Taylor, A. R., Skopal, A., and Kenny, H. T. 2001, "The symbiotic star CH Cygni - I. Non-thermal bipolar jets", *Monthly Not. R. Astr. Soc.*, **326**, 781.
34. Eyres, S.P.S., Bode, M.F., Taylor, A.R. Crocker, M.M. and Davis, R.J. 2001, "The Inner Nebula and Central Binary of the Symbiotic Star HM Sge", *Astrophysical Journal*, **551**, 512.
35. Peracaula, M., Paredes, J. M.; Taylor, A. R.; Dougherty, S. M. and Scott, W. K. 2001, "VSOP Observations of the X-Ray Binary LS I +61°303", *Astrophysics and Space Science*, **276**, 123-124.
36. English, J., Taylor, A.R., Mashchenko, S.Y., Irwin, J.A., Basu, S. and Johnstone, D. 2000, "Galactic Worm 123.4-1.5: A Mushroom-shaped HI Cloud", *Astrophysical Journal Letters*, **533**, L25 – L28.
37. Fomalont, E.B., Frey, S., Paragi, Z., Gurvits, L.I., Scott, W.K., Taylor, A.R., Edwards, P.G. and Hirabayashi, H., 2000, "The VSOP 5 GHz Continuum Survey: The Pre-Launch VBLA Observations", *Astrophysical Journal Supplements*, **131**, 95 – 183.
38. Gibson, S.J., Taylor, A.R., Higgs, L.A. and Dewdney, P.E. 2000, "A New View of Cold HI Clouds in the Milky Way", *Astrophysical Journal*, **540**, 851 – 862.
39. Hirabayashi, H., Hirose, H., ... Taylor, A.R., ... 2000, "The VLBI space observatory programme and the Radio-astronomical satellite HALCA", *Publ. Astr. Soc. of Japan*, **52**, 955 – 965.
40. Normandeau, M., Taylor, A.R. and Dewdney, P.E., 2000, "G132.6-0.7-25.3: A Wind Blown HI Shell near W3", *Astronomical Journal*, **119**, 2982 – 2990.
41. Wallace, B.J., Landecker, T.L., Kalberla, P.M.W. and Taylor, A.R. 1999, "The Interstellar Environment of Filled-Centre Supernova Remnants III: The Crab Nebula", *Astrophysical Journal Supplements*, **124**, 181 – 194.
42. Gregory, P.C., Peracaula, M. and Taylor, A.R. 1999, "Bayesian Periodic Signal Detection II: Discovery of Periodic Phase Modulations in LSI+61303", *Astrophysical Journal*, 520, 376 – 390.
43. Taylor, A.R., Irwin, J.A., Matthews, H.E. and Heyer, M.H. 1999, "JCMT Observations of Cometary Molecular Clouds in the Galactic Chimney near W4", *Astrophysical Journal*, **520**, 339 – 390.
44. Gray, A.D., Landecker, T.L., Dewdney, P.E., Taylor, A.R. and Normandeau, M. 1999 "Polarimetry as a Probe of the Interstellar Medium I. 1420 MHz Faraday Rotation Effects Toward the W3/4/5 Complex", *Astrophysical Journal*, **514**, 221 – 231.
45. Gray, A.D., Landecker, T.L., Dewdney, P.E. and Taylor, A.R. 1998, "A Large-scale Interstellar Faraday-Rotation Feature of Unknown Origin", *Nature*, **393**, 660 – 662.
46. English, J., Taylor, A.R., et al. 1998, "The Canadian Galactic Plane Survey", *Pub.*

- Astr. Soc. Australia*, **15**, 56 – 59.
47. Hirabayashi, H., Hirosawa, H., ... Taylor, A.R., et al., 1998 “Overview and Initial Results of the Very Long Baseline Interferometry Space Observatory Programme”, *Science*, **281**, 1825- 1829.
 48. Matthews, B.C., Wallace, B.J. and Taylor, A.R. 1998, “G55.0+0.3: A Highly Evolved Supernova Remnant”, *Astrophysical Journal*, **493**, 312 – 325.
 49. Peracaula, M., Gabuzda, D.C. and Taylor, A.R., 1997, "Rapid Expansion of the VLBI Structure of LSI+61303", *Astronomy & Astrophysics*, **330**, 612 - 618.
 50. Taylor, A.R., Goss, W.M., Coleman, P.H., van Leeuwen, J. and Wallace, B.J. 1997, “A Westerbork Synthesis Radio Telescope 327 MHz Survey of the Galactic Plane”, *Astrophysical Journal Supp.*, **107**, 239.
 51. Wallace, B.J., Landecker, T.L. and Taylor, A.R. 1997, “The Interstellar Environments of Filled-Centre Supernova Remnants II: G63.7+1.1”, *Astronomical Journal*, **114**, 2068.
 52. Normandeau, M., Taylor, A.R. and Dewdney, P.E., 1997, “The DRAO Galactic Plane Survey Pilot Project: the W3/4/5/HB3 Region”, *Astrophysical Journal Supp.*, **108**, 279.
 53. Wallace, B.J., Landecker, J.F., Taylor, A.R. and Pineault, S. 1997 “The HI Environment of Filled-Centre Supernova Remnants: I. G74.9+1.2”, *Astronomy & Astrophysics*, **317**, 212.
 54. Normandeau, M., Taylor, A.R. and Dewdney, P.E., 1996, “A Galactic Chimney in the Perseus Arm”, *Nature*, **380**, 687.
 55. Taylor, A.R., Young, G., Peracaula, M., Kenny, H.T. and Gregory, P.C. 1996 “An X-ray Outburst from the Radio-Emitting X-ray Binary LSI+61°303”, *Astronomy & Astrophysics*, **305**, 817.
 56. Skopal, A., Bode, M.F., ... Taylor, A.R.,... 1996 “Multi-Frequency Observations of the Eclipsing Symbiotic Triple System CH Cyg during the 1992 - 94 Active Phase”, *Mon. Not. Roy. astr. Soc.*, **282**, 327.
 57. Heyer, M.H., Brunt, C., ... Taylor, A.R.,... 1996 “A Massive Cometary Cloud Associated with IC1805”, *Astrophysical Journal Letters*, **464**, L175.
 58. Magnier, E. A., Waters, L.B.F.M., Kuan, Y., Chu, Y., Taylor, A.R., Matthews, H.E. and Martin, E.L. 1996 “A Bipolar Outflow Object in the Field of M36”, *Astronomy and Astrophysics*, **305**, 936.
 59. Tsutsumi, T., Gregory, P.C., Duric, N. and Taylor, A.R. 1995 “VLA Structure of Variable Sources in the Galactic Plane”, *Astronomical Journal*, **110**, 238.
 60. Gussie, G.T. and Taylor, A.R. 1995, “HI and CO Observations of the Circumstellar Envelopes of Planetary Nebulae”, *Mon. Not. R. Astron. Soc.*, **273**, 801-811.
 61. Gussie, G.T., Taylor, A.R., Dewdney, P.E. and Roger, R.S. 1995, “Molecular Photodissociation in the Neutral Envelopes of Planetary Nebulae”, *Mon. Not. R. Astron. Soc.*, **273**, 790-800.
 62. Fernandez-Castro, T., Gonzalez-Riestra, R., Cassatella, A., Taylor, A.R. and Seaquist, E.R. 1995, “The Active Phase of the Hot Component of Z Andromedae”, *Astrophysical Journal*, **442**, 366-380.
 63. Dougherty, S.M. and Taylor, A.R. 1994, “Near-IR Variability of Be Stars”, *Mon. Not. R. Astron. Soc.*, **269**, 1123-1136.
 64. Gussie, G.T. and Taylor, A.R. 1994, "On the Expansion Velocities of Planetary Nebulae and the Circumstellar Envelopes of AGB Stars", *Pub. Astronomical Society of the Pacific*, **106**, 500-507.
 65. Wallace, B.J., Landecker, T.L. and Taylor, A.R., 1994 "HI Voids around Filled-Center Supernova Remnants", *Astronomy & Astrophysics*, **286**, 565-578.
 66. Dougherty, S.M., Waters, L.B.F.M., Burki, G., Coté, J., Cramer, N., van Kerkwijk, M.H and Taylor, A.R. 1994, “Near-IR Excess of Be Stars”, *Astronomy & Astrophysics*,

- 290**, 609-624.
67. Seaquist, E.R., Krogulec, M. and Taylor, A.R. 1993 "A Highly Sensitive Radio Survey of Symbiotic Stars at 3.6cm", *Astrophysical Journal*, **410**, 260-274.
 68. Dougherty, S.M., Cramer, N., van Kerkwijk, M.H., Taylor, A.R., and Waters, L.B.F.M. 1993 "Intrinsic IR Colours of Normal B-type Stars Using the Geneva Visual and ESO IR Photometric Systems", *Astronomy and Astrophysics*, **273**, 503 - 508.
 69. Taylor, A.R. Kenny, H.T., Spencer, R.E. and Tzioumis, A. 1992 "VLBI Observations of the X-ray Binary LSI+61°303", *Astrophysical Journal*, **395**, 268-274.
 70. Dougherty, S.M. and Taylor, A.R. 1992, "Resolution of the Circumstellar gas around the Be star Psi Persei", *Nature*, **359**, 808-810.
 71. Taylor, A.R., Wallace, B.J. and Goss, W.M. 1992, "New Galactic Plane Supernova Remnants", *Astronomical Journal*, **103**, 931-942.
 72. Meurs, E.J.A., Pitters, A.J.M., Pols, O.R., Waters, L.B.F.M., Coté, J., van Kerkwijk, M.H., van Paradijs, J., Burki, G., Taylor, A.R. and de Martino, D., 1992 "ROSAT Survey Observations of OB and OBe Stars", *Astronomy and Astrophysics Lett.*, **265**, L41-44.
 73. Likkell, L., Gussie, G.T., Taylor, A.R. and Dewdney, P.E. 1992 "1420 and 408MHz Observations of the Planetary Nebulae BD+30°3639 and AFGL 618", *Astronomical Journal*, **103**, 538-543.
 74. Seaquist, E.R. and Taylor, A.R. 1992, "Observations of Symbiotic Stars at Millimeter and Submillimeter Wavelengths", *Astrophysical Journal*, **387**, 624-630.
 75. Dougherty, S.M., Taylor, A.R. and Clark, T.A. 1991, "Near-IR Observations of 101 Be Stars", *Astronomical Journal*, **102**, 1753.
 76. Dougherty, S.M., Taylor, A.R. and Waters, L.B.F.M. 1991, "Radio Variability of Be Stars", *Astronomy & Astrophys.*, **148**, 175.
 77. Taylor, A.R., Gregory., P.C. Duric, N. and Tsutsumi, T. 1991, "A new Galactic Source with a Radio Jet, GT2318+620", *Nature*, **351**, 547-549.
 78. Waters, L.B.F.M., van der Veen, W.E.C.J., Taylor, A.R., Marlborough, J.M. and Dougherty, S.M. 1991, "The Structure of Circumstellar Discs of Be Stars: Millimeter Observations", *Astronomy & Astrophys.*, **244**, 120-130.
 79. De Martino, D., Waters, L.B.F.M., Habets, G.M.H.J. and Taylor, A.R. 1990, "X-ray Variability in Transient X-ray Sources", *Il Nuovo Cimento*, **13**, 471 – 480.
 80. Kenny, H.T., Taylor, A.R. and Seaquist, E.R. 1990, "AG Pegasi: A Multi-shell Radio Source", *Astrophysical Journal*, **366**, 549 – 559.
 81. Leahy, D.A., Taylor, A.R. and Young, G. 1990, "HI Spectrum of the Symbiotic Nova HM Sge", *Astronomical Journal*, **99**, 1926 – 1929.
 82. Taylor, A.R., Waters, L.B.F.M., Bjorkman, K.S. and Dougherty, S.M. 1990, "A Radio Survey of IRAS Selected Be Stars", *Astron. & Astrophys.*, **231**, 453 – 458.
 83. Taylor, A.R., Gussie, G.T. and Pottash, S.R. 1990, "Circumnebuluar Neutral Hydrogen in Planetary Nebulae", *Astrophysical Journal*, **351**, 515 – 521.
 84. Seaquist, E.R. and Taylor, A.R. 1990, "The Collective Radio Properties of Symbiotic Stars", *Astrophysical Journal*, **349**, 313 – 327.
 85. Gussie, G.T. and Taylor, A.R. 1989, "Radio and Expansion Velocities of Compact Planetary Nebulae", *Pub. Astr. Soc. Pacific*, **101**, 873 – 876.
 86. Tsuru, T., Makishima, K. Ohashi, T., Inoue, H., Koyama, K., Turner, M.J.L., Barstow, M.A., McHardy, I.A., Pye, J.J., Tsunemi, H., Kitamoto, S., Taylor, A.R. and Nelson,

- S. 1989, “X-ray and Radio Observations of Flares from the RS Cvn System UX Ari”, *Publ. Astron. Soc. Japan*, **41**, 679 – 695.
87. Waters, L.B.F.M., de Martino, D., Habets, G.M.H.J. and Taylor, A.R. 1989, “X-ray Light Curves of Be/X-ray Binaries”, *Astron. & Astrophys.*, **223**, 207.
88. Waters, L.B.F.M., Boland, W., Taylor, A.R. van de Stadt, H. and Lamers, H.J.G.L.M. 1989, “Millimetre Observations of the Be Stars ψ Persei and γ Cass”, *Astron. & Astrophys. Letters*, **213**, L19 – L22.
89. Taylor, A.R., Gussie, G.T. and Goss, W.M. 1989, “VLA Imaging of Circumstellar Neutral Hydrogen in IC 418”, *Astrophysical Journal*, **340**, 932 – 942.
90. Moran, J.P., Davis, R.J., Bode, M.F., Taylor, A.R., Spencer, R.E., Argue, A.N., Irwin, M.J. and Shanklin, J.D. 1989, “MERLIN Observations of the Wolf-Rayet Star AS431 (WR 147) – A Double Radio Source”, *Nature*, **340**, 449.
91. Taylor, A.R., Davis, R.J., Porcas, R.W. and Bode, M. F. 1989, “VLBI Observations of RS Oph – A Recurrent Nova With non-Spherical Ejections”, *Mon. Not. Roy. astr. Soc.*, **234**, 81 – 91.
92. Taylor, A.R., Hjellming, R.M., Seaquist, E.R. and Gerhz, R.D., 1988, “Radio Images of the Expanding Ejecta of Nova QU Vulpeculae 1984”, *Nature*, **335**, 235 – 237.
93. Anandarao, B.G., Taylor, A.R. and Pottasch, S.R. 1988, “Dust Emission from Symbiotic Stars: An Interpretation of IRAS Observations”, *Astron. & Astrophys.*, **203**, 361 – 366.
94. Walton, N.A., Pottasch, S.R., Reay, N.K. and Taylor, A.R. 1988, “The Central Star of NGC 7027”, *Astron. & Astrophys. Letters*, **200**, L21 – L24.
95. Waters, L.B.F.M. and Taylor, A.R. 1988, “Evidence for Low Velocity Winds in Be/X-ray Binaries”, *Astron. & Astrophys.*, **198**, 200 – 210.
96. Taylor, A.R., Seaquist, E.R., Hollis, J.M. and Pottasch, S.R. 1987, “The Unusual Radio Outburst of Nova Vulpeculae 1984 No. 2”, *Astron. & Astrophys.*, **183**, 38 – 46.
97. Taylor, A.R., Waters, L.B.F.M., Lamers, H.J.G.L.M., Persi, P. and Bjorkman, K.S. 1987, “Radio Detection of the Be Star Psi Persei”, *Mon. Not. Roy. astr. Soc.*, **228**, 811 – 817.
98. Taylor, A.R., Pottasch, S.R. and Zhang, C.Y. 1987 “Radio Continuum Spectra of Compact Planetary Nebulae: A Wind-shell Model”, *Astron. & Astrophys.*, **171**, 178 – 188.
99. Taylor, A.R. and Pottasch, S.R. 1987, “Detection of Neutral Hydrogen in the Planetary Nebula IC 418”, *Astron. & Astrophys. Letters*, **176**, L5 – L8.
100. Spoelstra, T.A.T., Taylor, A.R., Pooley, G.G., Evans, A. and Albinson, J.S. 1987, “Pointers to Conditions in the Remnant of RS Ophiuchi from Radio Observations”, *Mon. Not. Roy. astr. Soc.*, **224**, 791 – 799.
101. Seaquist, E.R. and Taylor, A.R. 1987, “A Detailed Analysis of the Radio Emission from the Symbiotic Star RX Pup”, *Astrophysical Journal*, **312**, 813 – 821.
102. Irwin, J.A., Seaquist, E.R., Taylor, A.R. and Duric, N. 1987, “Evidence for Ram Pressure Stripping of NGC 3073 by Outflowing Gas from NGC 3079”, *Astrophysical Journal Letters*, **313**, L91 – L94.
103. Leahy, D.A. and Taylor, A.R. 1987, “X-ray Emission from the Symbiotic System CH Cygni”, *Astron. & Astrophys.*, **176**, 262 – 266.
104. Duric, N., Gregory, P.C. and Taylor, A.R. 1987, “Two-EPOCH VLA Observations of Variable Galactic Plane Radio Sources”, *Astronomical Journal*, **93**, 890 – 897.

105. Frail, D.A., Seaquist, E.R. and Taylor, A.R. 1987, "Extended Emission Around the Variable Radio Star LSI+61303", *Astronomical Journal*, **93**, 1506 – 1510.
106. Gregory, P.C. and Taylor, A.R. 1987, "Radio Patrol of the Northern Milky Way: A Catalogue of Sources II", *Astronomical Journal*, **92**, 371 – 411.
107. Seaquist, E.R. and Taylor, A.R. 1986, "A Radio Jet Associated with the Symbiotic Star CH Cygni", *Canadian Journal of Physics*, **64**, 520 – 522.
108. Hjellming, R.H., van Gorkum, J.H., Taylor, A.R., Seaquist, E.R., Padin, S., Davis, R.J. and Bode, M.F. 1986, "Radio Observations of the 1985 Outburst of RS Ophiuchi", *Astrophysical Journal Letters*, **305**, L71 – L75.
109. Taylor, A.R., Seaquist, E.R. and Mattei, J.A. 1986, "An Outburst and Radio Jet from the Symbiotic Star CH Cygni", *Nature*, **319**, 38 – 41.
110. Gregory, P.C., Duric, N., Reid, A., Picha, J., Stevenson, T. and Taylor, A.R. 1986, "Variable Radio Source GT0116+622 is a Possible Counterpart to Cas Gamma-1", *Nature*, **323**, 602 – 603.
111. Taylor, A.R., and Seaquist, E.R. 1985, "A Deep VLA Survey of a Galactic Field: A Search for Stellar Radio Emission", *Astronomical Journal*, **90**, 2049 – 2054.
112. Taylor, A.R. and Seaquist, E.R. 1984, "HI Absorption to Galactic Plane Variables: Evidence for New Rapidly Variable Extragalactic Radio Sources", *Astronomical Journal*, **89**, 1692 – 1694.
113. Taylor, A.R. and Seaquist, E.R. 1984, "Radio Emission from Symbiotic Stars: A Binary Model", *Astrophysical Journal*, **286**, 263 – 268.
114. Taylor, A.R., Seaquist, E.R. and Gregory, P.C. 1984, "High Resolution Observations of Galactic Plane Radio Variables", *Astronomical Journal*, **89**, 1180 – 1189.
115. Taylor, A.R. and Gregory, P.C. 1984, "Two-Frequency Radio Spectra During an Outburst of the Period Radio Star LSI+61303", *Astrophysical Journal*, **283**, 273 – 278.
116. Seaquist, E.R., Taylor, A.R. and Button, S. 1984, "A Radio Survey of Symbiotic Stars", *Astrophysical Journal*, **284**, 202 – 210.
117. Taylor, A.R. and Gregory, P.C. 1983, "Radio Patrol of the Northern Milky Way: A Catalogue of Sources", *Astronomical Journal*, **88**, 1784 – 1809.
118. Fontaine, G., Villeneuve, B., Landstreet, J.D. and Taylor, A.R. 1982, "H α and H β Line Profiles of Be Stars", *Astrophysical Journal Supp.*, **49**, 259 – 266.
119. Taylor, A.R. and Gregory, P.C. 1982, "Periodic Radio Emission from LSI+61303", *Astrophysical Journal*, **255**, 210 – 216.
120. Gregory, P.C. and Taylor, A.R. 1981, "Radio Patrol of the Northern Milky Way: A Survey for Variable Sources", *Astrophysical Journal*, **248**, 596 – 605.
121. Seaquist, E.R., Garrison, R.F., Gregory, P.C., Taylor, A.R. and Crane, P.C. 1979, "Radio and Optical Observations of SS 433", *Astronomical Journal*, **84**, 1037 – 1041.
122. Gregory, P.C., Taylor, A.R., Crampton, D., Hutchings, J.B., Hjellming, R.M., Hogg, D., Hvatum, H., Gottlieb, E.W., Feldman, P.A. and Kwok, S. 1979, "The Radio, Optical, X-ray(?), Gamma-ray(?) Star LSI+61303", *Astronomical Journal*, **84**, 1030 – 1036.
123. Feldman, P.A., Taylor, A.R., Gregory, P.C., Seaquist, E.R., Baloneck, T.J. and Cohen, N.L. 1978, "Discovery of Stron Radio Flaring from HR 1099", *Astronomical Journal*, **83**, 1471 – 1484.
124. Gregory, P.C. and Taylor, A.R. 1978, "New Highly Variable Radio Source, Possible Counterpart of γ -ray Source CG135+1", *Nature*, **272**, 704 – 706.

Refereed Journal Publications (submitted)

1. Stil, J.M., Taylor, A.R. and Sunstrum, C. 2010, "Structure in the Rotation Measure Sky", *Astrophysical Journal*
2. Lee, J., Pen, Ue-Li, Taylor, A.R., Stil, J.M and Sunstrum, C. 2009, "Detection of Large-Scale Cosmic Magnetic Fields", *Astrophysical Journal Letters*.

Books Edited

- Taylor, A.R., Landecker, T.L. and Willis, A.G. 2002, "Seeing Through the Dust: The Detection of HI and the Exploration of the ISM of Galaxies", *Astronomical Society of the Pacific Conference Series*, Volume 276.
- Taylor, A.R., Landecker, T.L. and Joncas, G. 1999, "New Perspectives on the Interstellar Medium", *Astronomical Society of the Pacific Conference Series*, Volume 168.
- Taylor, A.R. and Braun, R. 1999, "Science with the Square Kilometre Array: A Next Generation World Radio Observatory", *University of Calgary*.
- Taylor, A.R. and Paredes, J.M. 1996, "Radio Emission from the Stars and the Sun", *Astronomical Society of the Pacific Conference Series*, Volume 93.

Papers Published in Refereed Conference Proceedings

1. Guram, S. S. and Taylor, A. R., 2009, "The Galactic ALFA Continuum Transit Survey: GALFACTS", in *The Low-Frequency Radio Universe*, ASP Conf. Series, Vol. p. 282 - 286.
2. Taylor, A.R. 2009, "High-Resolution Spectro-polarimetric Surveys", in *The Low-Frequency Radio Universe*, ASP Conference Series, Vol. p.12 - 22. (*invited*)
3. Grant, J.K, Taylor, A.R., Stil, J.M., Ricci, R., O'Sullivan, S.P., Landecker, T.L., Kothes, R. and Ransom, R.R. 2009, "DRAO Deep Polarization Study at 1.4 GHz" in *Cosmic Magnetic Fields, From Planets to Stars and Galaxies*, IAU Symposium, Vol. 259, p. 559 – 560.
4. Stil, J.M., Krause, M., Mitchell, L., Beck, R. and Taylor, A.R. 2009, "The Integrated Polarization of Spiral Galaxies" in *Cosmic Magnetic Fields, From Planets to Stars and Galaxies*, IAU Symposium, Vol. 259, p. 543 – 544.
5. Landecker, T.L., Reich, W., Ried, R.I., Wolleben, M., Kothes, R., Del Rizzo, D., Uyaniker, B., Gray, A.D., Furst, E., Taylor, A.R. and Wielebinski, R., 2009, "The Polarized Emission from the Galactic Plane at Arcminute Angular Resolution", in *Cosmic Magnetic Fields, From Planets to Stars and Galaxies*, IAU Symposium, Vol. 259, p. 539 – 540.
6. Wolleben, M., Landecker, T.L, Carretti, E., Dickey, J.M., Fletcher, A., Gaensler, B.M., Han, J.L., Haverkorn, M., Leahy, J.P., McClure-Griffiths, N.M., McConnell, D., Reich, W. and Taylor, A.R. 2009, "GMIMS: the Global Magneto-Ionic Medium Survey" in *Cosmic Magnetic Fields, From Planets to Stars and Galaxies*, IAU Symposium, Vol. 259, p. 89 – 90.
7. O'Sullivan, S.P., Stil, J.M., Taylor, A.R., Ricci, R., Grant, J.K. and Shorten, K. 2009, "Simulations of the Polarized Sky at 1.4 GHz", *Proceedings of the 9th European VLBI Symposium*, Bologna, Italy.
8. Taylor, A.R. 2008, "The Square Kilometre Array", in *A Giant Step: from Milli- to Micro-arcsecond Astrometry*, IAU Symposium, Vol. 248, p 164 – 169.

9. Stil, J. M., Taylor A.R., Krause, M. and Beck, R. 2008, "Polarization of mJy Radio Sources", in Contributions MRU 2007.
10. Gibson, S.J., Taylor, A.R., Stil, J.M., Brunt, C., Kavars, D.W., Dickey, J.M. 2007, "Cold HI in Turbulent eddies and Galactic Spiral Shocks", in Triggered Star Formation in a Turbulent ISM, IAU Symposium, 237, Cambridge University Press, pp. 363 – 367.
11. Scott, W. K., Taylor, A. R., Horiuchi, S., Fomalont, E. B., Lister, M. L., Moellenbrock, G. A., Dodson, R. G.; Edwards, P. G.; Hirabayashi, H., Murata, Y., Shen, Z.-Q., Lovell, J. E. J., Tingay, S.; Frey, S., Mosoni, L., Gurvits, L., Paragi, Z., Piner, G. Fodor, S. and Coldwell, G. V. 2005, "The VSOP 5 GHz Continuum Survey: The Initial Imaging Results", in *Future Directions in High Resolution Astronomy: The 10th Anniversary of the VLBA*, ASP Conference Series, Vol. 340. eds. J. Romney and M. Reid., p.125.
12. Horiuchi, S., Fomalont, E. B., Moellenbrock, G. A., Scott, W. A., Taylor, A. R., Lovell, J. E. J., Dodson, R., Murata, Y., Hirabayashi, H., Edwards, P. G., Fujisawa, K. 2005, "The VSOP Survey: The Angular Size/Brightness Temperature Distribution" in *Future Directions in High Resolution Astronomy: The 10th Anniversary of the VLBA*, ASP Conference Series, Vol. 340. eds. J. Romney and M. Reid., p.95.
13. Taylor, A.R. 2004, "Observations of the Galactic Magnetic Field from the IGPS", in *Diffuse Matter in the Galaxy: Observations Confront Theory*, Arecibo, 2004 (invited).
14. Gibson, S. J., Taylor, A. R., Stil, J. M., Higgs, L. A., Dewdney, P. E., & Brunt, C. M. 2004, "Dark Hydrogen in the Galactic Plane" in *How Does the Galaxy Work? A Galactic Tertulia with Don Cox and Ron Reynolds*, eds. E. J. Alfaro, E. Pérez, & J. Franco, Kluwer Academic Publishers, in press.
15. Taylor, A.R., 2004, "Neutral Hydrogen in the Milky Way", in "*Radio Astronomy at 70: from Karl Jansky to microjansky*", EAS Publication Series, eds. S. Frey, S. Rawlings and L. Gurvits, in press. (invited)
16. Brocksopp, C., Bode, M.F., Eyers, S.P.S., Crocker, M.M. Davis, R. and Taylor, A.R., 2003, "The Central Binary and Surrounding Nebula of the Symbiotic Star V1016 Cyg", in *Symbiotic Stars Probing Stellar Evolution*, ASP Conference Series, Vol. 303, eds. R. L. M. Corradi, R. Mikolajewska and T. J. Mahoney, p. 454.
17. English, J. and Taylor, A.R. 2002, "Recycling the ISM: Radio Continuum and FIR Emission in Cygnus", in *The Dynamics, Structure and History of Galaxies*, ASP Conference Series, Vol 273, eds. G.S. Da Costa and H. Jerjen, p. 313.
18. Taylor, A.R., Stil, J.M., Dickey, J.M., McClure-Griffiths, N.M., Martin. P.G., Rothwell, T. and Lockman. J. 2002, "The VLA Galactic Plane Survey", in *Seeing Through the Dust: The Detection of HI and the Exploration of the ISM of Galaxies*, ASP Conference Series, Vol. 276, eds. A.R Taylor, T.L. Landecker and A.G. Willis, p. 68.
19. Cote, S., Taylor, A.R. and Dewdney, P.E. 2002, "HI Survey Science with the Canadian Large Adaptive Reflector, in *Seeing Through the Dust: The Detection of HI and the Exploration of the ISM of Galaxies*, ASP Conference Series, Vol. 276, eds. A.R Taylor, T.L. Landecker and A.G. Willis, p. 92.
20. Strasser, S. and Taylor, A.R., "Studying the Structure of the Galaxy using Background Sources", in *Seeing Through the Dust: The Detection of HI and the Exploration of the ISM of*

- Galaxies*, ASP Conference Series, Vol. 276, A.R Taylor, T.L. Landecker and A.G. Willis (eds.), 2002, p. 145.
21. Douglas, K.A. and Taylor, A.R., 2002, “Tracing Diffuse H₂ in the Galactic Plane”, in *Seeing Through the Dust: The Detection of HI and the Exploration of the ISM of Galaxies*, ASP Conference Series, Vol. 276, eds. A.R Taylor, T.L. Landecker and A.G. Willis, p. 256.
 22. Douglas, K.A. and Taylor, A.R. 2002, “Diffuse Infrared Excess Features in the Canadian Galactic Plane Survey”, in *Chemistry as a Diagnostic of Star Formation*, eds. C.L. Curry and M. Fich .
 23. Taylor, A.R. 2001, “Prospects for High Angular Resolution at Metre to Centimetre Wavelengths”, in *Galaxies and their Constituents at the Highest Angular Resolution*, IAU Symposium 205, eds. R. Schilizzi, S.N. Vogel, F. Paresce and M.S. Elvis, ASP (*invited*).
 24. Taylor, A.R. 2000, “Low Frequency Science with the Square Kilometre Array”, in *The Universe at Low Radio Frequencies*, IAU Symposium 199, ASP Conferences Series, ed. A. Pramesh Rao. (*invited*)
 25. Taylor, A.R. 2000, “Galactic Plane Surveys at Low Frequencies”, in *The Universe at Low Radio Frequencies*, IAU Symposium 199, ASP Conferences Series, ed. A. Pramesh Rao. (*invited*)
 26. Taylor, A.R. 2000, “VSOP Imaging of the Unusual X-ray Binary Star LSI+61303”, in *Astrophysical Phenomena Revealed by Space VLBI*, ISAS, eds. H. Hirabayashi, P.G. Edwards & D.W. Murphy, p. 223 - 226.
 27. Fomalont, E. Hirabayashi, H., ... Taylor, A.R.... 2000, “The VSOP Survey I: Description of Participation”, in *Astrophysical Phenomena Revealed by Space VLBI*, ISAS, eds. H. Hirabayashi, P.G. Edwards & D.W. Murphy, p. 167 – 176.
 28. Moellenbrock, G.A., Lovell, H.,... Taylor, A.R.,... 2000, “The VSOP Survey II: Reduction Methods”, in *Astrophysical Phenomena Revealed by Space VLBI*, ISAS, eds. H. Hirabayashi, P.G. Edwards & D.W. Murphy, p. 177 - 182.
 29. Taylor, A.R. 2000 “The Square Kilometre Array: A Science Overview”, in *Perspectives on Radio Astronomy: Scientific with Large Antenna Arrays*, ed. M.P. van Harleem, NFRA, p. 1 - 10. (*invited*)
 30. Taylor, A.R., 1999, “Radio Stars: The High Sensitivity Frontier”, in *Modern Radio Science 1999*, Oxford University Press, p. 273 – 285. (*invited*).
 31. Taylor, A.R. 1999, “Radio Continuum Results from the Canadian Galactic Plane Survey”, in *New Perspectives on the Interstellar Medium*, ASP Conference Ser. 168, eds. A.R. Taylor, T.L. Landecker and G. Joncas, p.3 – 14. (*invited*)
 32. Gibson, J.S., Taylor, A.R., Dewdney, P.E., Higgs, L.A., McCutcheon, W.M. and Wendker, H.J. 1999 “Neutral Hydrogen Self-Absorption Features in the Canadian Galactic Plane Survey”, in *New Perspectives on the Interstellar Medium*, ASP Conference Ser. 168, eds. A.R. Taylor, T.L. Landecker and G. Joncas, p.383 – 386.
 33. Peracaula, M., Taylor, A.R., Bellchamber, T., Gray, A.D. and Landecker, T.L., 1999, “Polarisation Structures in the Milky Way”, in *New Perspectives on the Interstellar Medium*, ASP Conference Ser. 168, eds. A.R. Taylor, T.L. Landecker and G. Joncas, p.86 – 89.
 34. Brown, J.C., Taylor, A.R. and Peracaula, M. 1999, “The Interstellar Magnetic Field in the Ionized Filament CXR 11”, in *New Perspectives on the Interstellar Medium*, ASP Conference Ser. 168, eds. A.R. Taylor, T.L. Landecker and G. Joncas, p.223 – 226.
 35. Kenny, H.T., Taylor, A.R., Kwok, S., Eyers, S.P.S. and Davis, R.J. 1997, “Orbital Motion and a Model for HM Sge”, in *High Sensitivity Radio Astronomy*, Cambridge University Press, eds. N. Jackson and R.J. Davis, p. 37.
 36. Kenny, H.T., Taylor, A.R. et al. 1996, “New Radio Activity from CH Cygni”, in *Radio Emission from the Stars and the Sun*, ASP Conference Ser. 93, eds. A.R. Taylor and J.M. Paredes, p. 197 – 199.

37. Taylor, A.R., Young, G., Peracaula, M., Kenny, H.T. and Gregory, P.C. 1996, "Radio and X-ray Outbursts from LSI+61303", in *Radio Emission from the Stars and the Sun*, ASP Conference Ser. 93, eds. A.R. Taylor and J.M. Paredes, p. 255 – 257.
38. Tutsumi, T., Peracaula, M. and Taylor, A.R., 1996, Centimetre to Submillimetre Observations of Four Radio-emitting X-ray Binaries", in *Radio Emission from the Stars and the Sun*, ASP Conference Ser. 93, eds. A.R. Taylor and J.M. Paredes, p. 258 – 260.
39. Taylor, A.R. 1995, "Stellar Radio Astronomy: The High Sensitivity Frontier", International Workshop on Large Spherical Antennas, Guiyang, China. (*invited*)
40. Chen, H. and Taylor, A.R. 1994, "The Difference Between Be Stars and Shell Stars from H α Emission", in *Pulsation, Rotation and Mass-loss in Early-type Stars*, IAU Symposium 162, eds. L.A. Balona, H.F. Henrichs and J.M. Le Contel, p. 431-432.
41. Chen, H., Taylor, A.R., Dougherty, S.M. and Waters, L.B.F.M. 1994, "IR-Radio Spectral Indices for Be Stars", in *Pulsation, Rotation and Mass-loss in Early-type Stars*, , eds. L.A. Balona, H.F. Henrichs and J.M. Le Contel, p. 429-430
42. Dougherty, S.M. and Taylor, A.R. 1994, "Identification of IR Variable Be Stars", in *Pulsation, Rotation and Mass-loss in Early-type Stars*, IAU Symposium 162, eds. L.A. Balona, H.F. Henrichs and J.M. Le Contel, p. 416-417.
43. Dougherty, S.M. and Taylor, A.R. 1994, "The Structure of the Circumstellar Envelope of ψ Persei and Large Radii", in *Pulsation, Rotation and Mass-loss in Early-type Stars*, IAU Symposium 162, eds. L.A. Balona, H.F. Henrichs and J.M. Le Contel, p. 418-419.
44. Fejes, I., Murphy, D.M., Taylor, A.R., Yakimov, Y. and Young, G. 1993, "Space VLBI User Assistance Software", IAU Symposium, Kyoto, Japan.
45. Gabuzda, D.C. and Taylor, A.R. 1993, "Space VLBI Polarization Observations", in "VLBI Technology: Progress and Future Observational Possibilities", Sasao, T., Manabe, S., Kameya, O., and Inoue, M., Eds. (Tokyo: Terra Scientific Pub.
46. Murphy, D.W., Yakimov, V., Kobayashi, H., Taylor, A.R. and Fejes, I., 1993, "Space VLBI Simulations", IAU Symposium, Kyoto, Japan.
47. Taylor, A.R., 1992, "Interferometric Observations of Radio Stars", in *Sub-arcsecond Radio Astronomy*, Cambridge University Press, eds. R.J. Davis and R.S. Booth, p. 1. (*invited*)
48. Kenny, H.T., Taylor, A.R., Davis, R.J., Pavelin, P., Bode, M.F. and Bang, M. 1992, High Resolution Imaging of Symbiotic Stars", in *Sub-arcsecond Radio Astronomy*, Cambridge University Press, eds. R.J. Davis and R.S. Booth, p. 18.
49. Dougherty, S.M. and Taylor, A.R., 1992, "Resolving the Circumstellar Gas of Psi Persei", in *Sub-arcsecond Radio Astronomy*, Cambridge University Press, eds. R.J. Davis and R.S. Booth, p. 16.
50. Fernandez-Castro, T., Gonzalez-Riestra, R., Cassatella, A., Taylor, A.R. and Seaquist, E.R. 1992, "The Active Phase of the Hot Component of Z Andromedae", in *Planetary Nebulae*, IAU Symposium 155, Innsbruck. .
51. Taylor, A.R. 1991, "The Cosmic Microwave Background and the Radio Schmidt", in Proceeding of the Radio Schmidt Workshop", ed. T. Landecker., pp. 193. (*invited*)
52. Davis, R.J., Taylor, A.R., Bode, M.F. and Porcas, R.W. 1988, "RS Ophiuchi – A Recurrent Nova with Twin Jets", in *The Impact of VLBI on Astrophysics and Geophysics*, eds. M.J. Reid and J.M. Moran, Kluwer Academic Pub., pp. 277 – 278.
53. Taylor, A.R. 1988, "Radio Imaging of Symbiotic Stars", in IAU Colloquium 103, *The Symbiotic Phenomenon*, eds. J. Mikolajewska et al., Kluwer Academic Pub., pp. 77 – 83. (*invited*).
54. Taylor, A.R., Seaquist, E.R. and Kenyon, S.J. 1988, "Continued Radio Activity from CH

- Cygni”, in IAU Colloquium 103, *The Symbiotic Phenomenon*, eds. J. Mikolajewska et al., Kluwer Academic Pub., pp. 231 – 232.
55. Taylor, A.R., Bode, M.F., Davis, R.J. and Porcas, R.W. 1988, “Unravelling the Multiple Component Radio Emission of RS Oph in Outburst”, in IAU Colloquium 103, *The Symbiotic Phenomenon*, eds. J. Mikolajewska et al., Kluwer Academic Pub., pp. 335 – 336.
 56. Anandarao, B.G., Taylor, A.R. and Pottasch, S.R. 1988, “Far-infrared Emission in Symbiotic Stars”, ”, in IAU Colloquium 103, *The Symbiotic Phenomenon*, eds. J. Mikolajewska et al., Kluwer Academic Pub., pp. 65 – 66.
 57. De Martino, D., Waters, L.B.F.M., Habets, G.M.H.J. and Taylor, A.R. 1988, “X-ray Variability in Transient X-ray Sources”, in Proceedings of the 4th G.I.F.C.O. Conference, Capri.
 58. Taylor, A.R., Pottasch, S.R. and Zhang, C.Y. 1987, “A Wind-shell Model for Radio Emission from Compact Planetary Nebulae”, in *Late Stages of Stellar Evolution*, eds. S. Kwok and S.R. Pottasch, Dordrecht: Riedel, pp. 399 – 402.
 59. Seaquist, E.R. and Taylor, A.R. 1987, “Radio Evidence for Variable Mass Loss from the Symbiotic Star RX Puppis”, in *Late Stages of Stellar Evolution*, eds. S. Kwok and S.R. Pottasch, Dordrecht: Riedel, pp. 287 – 290.
 60. Leahy, D.A. and Taylor, A.R. 1987, “The Symbiotic System CH Cygni”, in *Late Stages of Stellar Evolution*, eds. S. Kwok and S.R. Pottasch, Dordrecht: Riedel, pp. 285 – 226.
 61. Taylor, A.R. 1987, “CH Cygni: A Nova-like Outburst and Radio Jet”, in *RS Ophiuchi and the Recurrent Nova Phenomenon*, ed. M.F. Bode, VNU Science Press, Utrecht, pp. 209 – 213. (*invited*).
 62. Spoelstra, T.A.T., Taylor, A.R., Pooley, G., Evans, A. and Albinson, J.S. 1987, “Pointers to Conditions in the Remnant of RS Ophiuchi from Radio Observations”, in *RS Ophiuchi and the Recurrent Nova Phenomenon*, ed. M.F. Bode, VNU Science Press, Utrecht, pp. 193 – 201.
 63. Taylor, A.R. 1985, “Radio Emission from Symbiotic Stars: A Binary Model”, in *Radio Stars*, eds. R.H. Hjellming and D.M. Gibson, Dordrecht: Riedel, pp. 147 – 150.