

**CURRICULUM VITAE AND BIBLIOGRAPHY**  
**JOAN MARIE WROBEL**  
**2022 FEBRUARY 9**

## **1 Personal**

**Date of birth:** 1954 January 15

**Place of birth:** Edson, Alberta, Canada

**Citizenship:** Canadian

**Marital status:** Married to Robert Craig Walker

**US INS status:** Permanent US resident

## **2 Education**

**1983:** Ph.D. (Astronomy), University of Toronto, Toronto, Ontario, Canada

**1978:** M.S. (Astronomy), University of Toronto, Toronto, Ontario, Canada

**1976:** B.S. (Honors Physics), University of Alberta, Edmonton, Alberta, Canada

**1972:** Matriculation, Parkland Composite High School, Edson, Alberta, Canada

## **3 Support, Research, and Teaching Positions**

**2020-:** Scientific Editor, AAS Journals, NRAO, Socorro, NM, USA

**2017-:** Scientist, National Radio Astronomy Observatory (NRAO), Socorro, NM, USA

**2015-2017:** Program Director, Astronomy and Astrophysics Research Grants, National Science Foundation (NSF), Arlington, VA, USA

**2015-2017:** Program Director, Faculty Early Career Development Program, NSF, Arlington, VA, USA

**1997-2014:** Scientist, NRAO, Socorro, NM, USA

**2011-2014:** Division Head, Telescope Time Allocation, NRAO, Socorro, NM, USA

**2010-2014:** Faculty Adjunct, New Mexico Institute of Mining and Technology, Socorro, NM, USA

**2008-2014:** Scientific Editor, The Astrophysical Journal (ApJ), NRAO, Socorro, NM, USA

**2001-2014:** Very Large Array (VLA) Scheduling Officer, NRAO, Socorro, NM, USA

**1997-2001:** Division Head for Array and Correlator Operations, NRAO, Socorro, NM, USA

**1992-1997:** Associate Scientist, NRAO, Socorro, NM, USA

**1994:** Science and Engineering Research Council Visiting Fellow, Jodrell Bank, UK

**1989-1992:** Assistant Scientist, NRAO, Socorro, NM, USA

- 1985-1989:** Research Collaborator (unpaid), VLA, Socorro, NM, USA
- 1985-1989:** Visiting Assistant Professor, Physics Department, New Mexico Institute of Mining and Technology, Socorro, NM, USA
- 1983-1985:** Postdoctoral Research Fellow, Caltech, Pasadena, CA, USA
- 1980-1983:** Predoctoral Research Fellow, NRAO, Charlottesville, VA, USA
- 1976-1977:** Teaching Assistant, Department of Astronomy, University of Toronto, Toronto, Ontario, Canada
- 1975:** Undergraduate Summer Student, Herzberg Institute of Astrophysics, National Research Council of Canada, Ottawa, Ontario, Canada
- 1974:** Undergraduate Summer Student, TRIUMF Project, University of British Columbia, Vancouver, BC, Canada

## **4 Scholarships, Fellowships, and Prizes**

- 2011:** NRAO Star Award
- 1994:** Science and Engineering Research Council Visiting Fellowship, Jodrell Bank
- 1985:** Research Fellowship, Caltech
- 1983-1985:** Natural Sciences and Engineering Research Council of Canada Postdoctoral Fellowship, Caltech
- 1981-1982:** NRAO Junior Research Associateship, NRAO
- 1980-1981:** Amelia Earhart Fellowship Award, NRAO
- 1979-1980:** Natural Sciences and Engineering Research Council of Canada Postgraduate Scholarship, University of Toronto
- 1977-1979:** National Research Council of Canada Postgraduate Scholarship, University of Toronto
- 1976-1977:** Walter Helm Fellowship in Astronomy, University of Toronto
- 1973-1976:** Province of Alberta Undergraduate Scholarship, University of Alberta
- 1973-1974:** Interprovincial Pipe Line Company Bursary, University of Alberta
- 1973-1974:** Cyril G. Wates Memorial Prize in Astronomy, University of Alberta
- 1972-1973:** Friends of the University Bursary, University of Alberta
- 1972-1973:** Province of Alberta Matriculation Scholarship, University of Alberta
- 1972-1973:** Prizes in English and Mathematics from Parkland Composite High School

## 5 Professional Society Memberships

**1991:** International Astronomical Union (IAU)

**1985:** American Association for the Advancement of Science

**1983:** American Astronomical Society (AAS)

**1983:** American Institute of Physics

## 6 Research Grants

**2013:** \$10,000 Research Grant from AAS for ApJ Scientific Editorship. Held at NRAO.

**2012:** \$10,000 Research Grant from AAS for ApJ Scientific Editorship. Held at NRAO.

**2011:** \$10,000 Research Grant from AAS for ApJ Scientific Editorship. Held at NRAO.

**2010:** \$10,000 Research Grant from AAS for ApJ Scientific Editorship. Held at NRAO.

**2009:** \$10,000 Research Grant from AAS for ApJ Scientific Editorship. Held at NRAO.

**2008:** \$10,000 Research Grant from AAS for ApJ Scientific Editorship. Held at NRAO.

**2008:** \$5,500 Start-Up Grant from AAS for ApJ Scientific Editorship. Held at NRAO.

**1986-1990:** Studies of Radio Sources in E/S0 Galaxies and Polarization Properties of Compact Radio Sources. NSF. Requested \$71,000 US and awarded \$71,000 US. Held at New Mexico Institute of Mining and Technology.

## 7 Professional Meetings Attended

**2022 Jan:** AAS Journals Editorial Board, Virtual

**2021 Aug:** AAS Journals Editorial Board, Virtual

**2021 Aug:** The Past, Present, and Future of the VLA: Celebrating 40 Years, Virtual

**2021 Feb:** AAS Journals Editorial Board, Virtual

**2021 Jan:** 237th Meeting of the AAS, Virtual

**2020 Jul:** Compact Objects and Energetic Phenomena in the Multi-Messenger Era, Virtual

**2020 Apr:** AAS Journals Editorial Board, Virtual

**2020 Feb:** New Mexico Symposium, Socorro, NM, USA

**2020 Jan:** 235th Meeting of the AAS, Honolulu, HI, USA

**2019 Jun:** Radio/Millimeter Astrophysical Frontiers in the Next Decade, Charlottesville, VA, USA

**2019 Apr:** Accretion Signatures of the Earliest Black Holes in the Universe, Princeton, NJ, USA

**2019 Jan:** 233rd Meeting of the AAS, Seattle, WA, USA

**2018 Nov:** New Mexico Symposium, Socorro, NM, USA  
**2018 Jul:** 12th International LISA Symposium, Chicago, IL, USA  
**2018 Jun:** Astrophysical Frontiers in the Next Decade and Beyond, Portland, OR, USA  
**2018 Jan:** 231st Meeting of the AAS, Washington, DC, USA  
**2017 Nov:** New Mexico Symposium, Socorro, NM, USA  
**2017 Jun:** Developing the ngVLA Science Program Workshop, Socorro, NM, USA  
**2017 Jan:** 229th Meeting of the AAS, Grapevine, TX, USA  
**2016 Aug:** US Radio/Millimeter/Submillimeter Science Futures II, Baltimore, MD, USA  
**2016 Jan:** 227th Meeting of the AAS, Kissimmee, FL, USA  
**2015 Sep:** Program Management Seminar, NSF, Arlington, VA, USA  
**2015 May-Dec:** Merit Review Basics, NSF, Arlington, VA, USA  
**2015 Jan:** Black Holes in Dense Star Clusters, Aspen, CO, USA  
**2015 Jan:** 225th Meeting of the AAS, Seattle, WA, USA  
**2015 Jan:** Next Generation Very Large Array Workshop, Seattle, WA, USA  
**2014 Nov:** New Mexico Symposium, Socorro, NM, USA  
**2014 Feb:** NRAO Telescope Time Allocation Review, Charlottesville, VA, USA  
**2013 May:** ApJ Editorial Board, Saskatoon, SK, Canada  
**2012 May:** ApJ Editorial Board, Washington, DC, USA  
**2012 Mar:** JIVE Review, Dwingeloo, The Netherlands  
**2012 Feb:** NM Operations Leadership 2012+, Socorro, NM, USA  
**2012 Jan:** 219th Meeting of the AAS, Austin, TX, USA  
**2011 Oct:** New Mexico Symposium, Socorro, NM, USA  
**2011 Oct:** Chandra Users' Committee, Boston, MA, USA  
**2011 May:** ApJ Editorial Board, Toronto, ON, Canada  
**2011 Mar:** Building on New Worlds, New Horizons, Santa Fe, NM, USA  
**2011 Jan:** 217th Meeting of the AAS, Seattle, WA, USA  
**2010 Nov:** New Mexico Symposium, Socorro, NM, USA  
**2010 Oct:** Chandra Users' Committee, Boston, MA, USA  
**2010 Apr:** Chandra Users' Committee, Boston, MA, USA

**2010 Feb:** Formation and Evolution of Black Holes, Aspen, CO, USA  
**2010 Jan:** New Mexico Symposium, Socorro, NM, USA  
**2009 Oct:** Chandra Users' Committee, Boston, MA, USA  
**2009 Jul:** New Science Enabled by Microarcsecond Astrometry, Socorro, NM, USA  
**2009 Jun:** Chandra Cycle 11 Peer Review, Boston, MA, USA  
**2009 May:** ApJ Editorial Board, Hamilton, ON, Canada  
**2009 Apr:** Intermediate-Mass Black Holes: from First Light to Galactic Nuclei, Irvine, CA, USA  
**2009 Jan:** 213th Meeting of the AAS, Long Beach, CA, USA  
**2008 Dec:** The EVLA Vision: Galaxies Through Cosmic Time, Socorro, NM, USA  
**2008 Nov:** Black Hole Astrophysics with Radio and Gravitational Wave Observations, Charlottesville, VA, USA  
**2008 Oct:** New Mexico Symposium, Socorro, NM, USA  
**2008 May:** ApJ Editorial Board, Bristol, UK  
**2008 Apr:** NRAO Staff Retreat, Socorro, NM, USA  
**2008 Feb:** NRAO New Mexico Staff Retreat, Socorro, NM, USA  
**2008 Jan:** 211th Meeting of the AAS, Austin, TX, USA  
**2007 Oct:** New Mexico Symposium, Socorro, NM, USA  
**2007 Jan:** 209th Meeting of the AAS, Seattle, WA, USA  
**2006 Jul:** Physics and Astrophysics of Supermassive Black Holes, Santa Fe, NM, USA  
**2006 May:** Legacy Projects Workshop, Socorro, NM, USA  
**2004 Dec:** New Opportunities for NRAO, Socorro, NM, USA  
**2004 Nov:** New Mexico Symposium, Socorro, NM, USA  
**2004 Jan:** 203rd Meeting of the AAS, Atlanta, GA, USA  
**2003 Oct:** New Mexico Symposium, Socorro, NM, USA  
**2003 Jun:** Future Directions in High Resolution Astronomy, Socorro, NM, USA  
**2003 Jan:** 201st Meeting of the AAS, Seattle, WA, USA  
**2002 Nov:** New Mexico Symposium, Socorro, NM, USA  
**2002 Oct:** Radio Astronomy at the Fringe, Green Bank, WV, USA  
**2002 Jun:** 200th Meeting of the AAS, Albuquerque, NM, USA  
**2002 Jan:** 199th Meeting of the AAS, Washington, DC, USA

**2001 Nov:** New Mexico Symposium, Socorro, NM, USA  
**2001 Aug:** EVLA Planning Workshop, Socorro, NM, USA  
**2001 Jun:** 198th Meeting of the AAS, Pasadena, CA, USA  
**2000 Oct:** New Mexico Symposium, Socorro, NM, USA  
**2000 Oct:** Deep Fields, Garching, Germany  
**1999 Oct:** New Mexico Symposium, Socorro, NM, USA  
**1999 Jun:** 194th Meeting of the AAS, Chicago, IL, USA  
**1999 Apr:** NRAO Long Range Planning Retreat, Green Bank, WV, USA  
**1999 Jan:** 193rd Meeting of the AAS, Austin, TX, USA  
**1998 Nov:** New Mexico Local Symposium, Socorro, NM, USA  
**1998 Oct:** OVRO 40th Anniversary Celebration, Big Pine, CA, USA  
**1998 Jun:** The VLA Upgrade Review, Socorro, NM, USA  
**1998 Jun:** Interferometry and Imaging, Socorro, NM, USA  
**1997 Oct:** New Mexico Local Symposium, Socorro, NM, USA  
**1997 Jul:** How to Supervise People, National Seminars Group, Albuquerque, NM, USA  
**1997 Apr:** Radio Emission from Galactic and Extragalactic Compact Sources, Socorro, NM, USA  
**1996 Oct:** New Mexico Local Symposium, Socorro, NM, USA  
**1995 Oct:** New Mexico Local Symposium, Socorro, NM, USA  
**1995 Oct:** Extragalactic Radio Sources, Bologna, Italy  
**1995 Jun:** Proposer Workshop for the VSOP Space VLBI Mission, Pasadena, CA, USA  
**1995 Mar:** Quasars and AGN: High Resolution Imaging, Irvine, CA, USA  
**1995 Jan:** The First VLA Upgrade Science Workshop, Socorro, NM, USA  
**1995 Jan:** 185th Meeting of the AAS, Tucson, AZ, USA  
**1994 Nov:** New Mexico Local Symposium, Socorro, NM, USA  
**1994 Feb:** Compact Extragalactic Radio Sources, Socorro, NM, USA  
**1992 Sep:** Sky Surveys: Protostars to Protogalaxies, Pasadena, CA, USA  
**1992 Aug:** Galactic Bulges, Ghent, Belgium  
**1992 Jul:** Sub-Arcsecond Radio Astronomy, Manchester, UK  
**1992 Jun:** NRAO Internal Symp., Green Bank, WV, USA

**1991 Dec:** Extragalactic Radio Astronomy - Issues and Prospects, Charlottesville, VA, USA  
**1991 Jul:** IAU 21st General Assembly, Buenos Aires, Argentina  
**1991 Jan:** 177th Meeting of the AAS, Philadelphia, PA, USA  
**1990 Oct:** Radio Interferometry - Theory, Techniques, and Applications, Socorro, NM, USA  
**1990 Jun:** 176th Meeting of the AAS, Albuquerque, NM, USA  
**1990 Mar:** The Interpretation of Modern Synthesis Observations of Spiral Galaxies, Albuquerque, NM, USA  
**1989 Nov:** The Millimeter Sky at High Resolution: Present and Future, Socorro, NM, USA  
**1989 Oct:** New Mexico Local Symposium, Socorro, NM, USA  
**1989 Oct:** Parsec-Scale Radio Jets, Socorro, NM, USA  
**1989 Jul:** The Interstellar Medium in External Galaxies, Jackson Lake Lodge, WY, USA  
**1989 Jan:** 173th Meeting of the AAS, Boston, MA, USA  
**1988 Nov:** New Mexico Local Symposium, Socorro, NM, USA  
**1988 Aug:** Active Galactic Nuclei, Santa Cruz, CA, USA  
**1988 Jan:** 171th Meeting of the AAS, Austin, TX, USA  
**1987 Nov:** New Mexico Local Symposium, Socorro, NM, USA  
**1987 May:** The Impact of VLBI on Astrophysics and Geophysics, Cambridge, MA, USA  
**1987 Jan:** 169th Meeting of the AAS, Pasadena, CA, USA  
**1986 Oct:** Superluminal Radio Sources, Big Bear, CA, USA  
**1986 Oct:** New Mexico Local Symposium, Socorro, NM, USA  
**1986 Jun:** Star Formation in Galaxies, Pasadena, CA, USA  
**1986 Jan:** 167th Meeting of the AAS, Houston, TX, USA  
**1985 Oct:** New Mexico Local Symposium, Socorro, NM, USA  
**1985 Aug:** Plasma Processes in Astrophysical Jets, Taos, NM, USA  
**1985 Jan:** 165rd Meeting of the AAS, Tucson, AZ, USA  
**1984 Jul:** Astrophysics of Active Galaxies and QSOs, Santa Cruz, CA, USA  
**1984 Jan:** 163rd Meeting of the AAS, Las Vegas, NV, USA  
**1983 Jun:** VLBI and Compact Radio Sources, Bologna, Italy  
**1982 Jun:** NRAO-VLA Workshop on Synthesis Mapping, Socorro, NM, USA  
**1981 Aug:** Extragalactic Radio Sources, Albuquerque, NM, USA  
**1980 Jun:** 156th Meeting of the AAS, College Park, MD, USA

## 8 Talks Presented

**2020 Nov:** NRAO, Socorro, NM, USA

**2019 Jun:** Charlottesville, VA, USA

**2019 Apr:** Princeton University, Princeton, NJ, USA

**2018 Sep:** NRAO, Socorro, NM, USA

**2018 Jul:** Chicago, IL, USA

**2015 Feb:** NSF, Arlington, VA, USA

**2014 Feb:** NRAO, Charlottesville, VA, USA

**2011 Apr:** NRAO, Socorro, NM, USA

**2011 Mar:** NRAO, Socorro, NM, USA

**2011 Mar:** Santa Fe, NM, USA

**2010 Jun:** NRAO, Socorro, NM, USA

**2010 Jun:** NRAO, Socorro, NM, USA

**2009 Apr:** University of California, Irvine, CA, USA

**2008 Nov:** NRAO, Socorro, NM, USA

**2008 Nov:** NRAO, Charlottesville, VA, USA

**2008 Oct:** University of British Columbia, British Columbia, Canada

**2008 Oct:** Herzberg Institute of Astrophysics, Victoria, British Columbia, Canada

**2008 Jun:** NRAO, Socorro, NM, USA

**2008 May:** University of Bristol, UK

**2008 Feb:** NRAO, Socorro, NM, USA

**2006 Nov:** NRAO, Socorro, NM, USA

**2006 Jul:** Santa Fe, NM, USA

**2006 Jun:** University of New Mexico, Albuquerque, NM, USA

**2004 Jun:** NRAO, Socorro, NM, USA

**2003 Jun:** NRAO, Socorro, NM, USA

**2002 Jun:** NRAO, Socorro, NM, USA

**2001 Jul:** NRAO, Green Bank, WV, USA

**2001 Jun:** NRAO, Socorro, NM, USA



**2001 May:** NRAO, Socorro, NM, USA  
**2000 Jun:** NRAO, Socorro, NM, USA  
**2000 Apr:** NRAO, Socorro, NM, USA  
**1999 Jul:** NRAO, Socorro, NM, USA  
**1999 Jun:** 194th Meeting of the AAS, Chicago, IL, USA  
**1999 Jan:** NRAO, Socorro, NM, USA  
**1998 Jun:** NRAO, Socorro, NM, USA  
**1996 Oct:** University of Toronto, Toronto, Ontario, Canada  
**1996 Apr:** NRAO, Socorro, NM, USA  
**1996 Jan:** NRAO, Charlottesville, VA, USA  
**1995 Oct:** TRAO, Torun, Poland  
**1995 Jun:** NRAO, Socorro, NM, USA  
**1994 Jul:** IRA, Bologna, Italy  
**1994 Jun:** MPIfR, Bonn, Germany  
**1994 Jun:** NFRA, Dwingeloo, The Netherlands  
**1994 Apr:** Jodrell Bank, UK  
**1993 Dec:** NRAO, Charlottesville, VA, USA  
**1993 Nov:** NMSU, Las Cruces, NM, USA  
**1993 Jun:** NRAO, Socorro, NM, USA  
**1992 Jun:** NRAO, Green Bank, WV, USA  
**1991 Dec:** NRAO, Charlottesville, VA, USA  
**1991 Oct:** HIA, NRC of Canada, Ottawa, Ontario, Canada  
**1991 Oct:** University of Toronto, Toronto, Ontario, Canada  
**1991 Aug:** NRAO, Socorro, NM, USA  
**1991 Jul:** IAU 21st General Assembly, Buenos Aires, Argentina  
**1991 Jun:** NRAO, Socorro, NM, USA  
**1990 Jul:** Caltech, Pasadena, CA, USA  
**1990 Mar:** The Interpretation of Modern Synthesis Observations of Spiral Galaxies, Albuquerque, NM, USA  
**1989 Oct:** Parsec-Scale Radio Jets, Socorro, NM, USA

**1988 Nov:** New Mexico Local Symp., Socorro, NM, USA  
**1988 Oct:** UCLA, Los Angeles, CA, USA  
**1988 Sep:** NRAO, VLA Site, NM, USA  
**1988 Apr:** NMIMT, Socorro, NM, USA  
**1987 Nov:** New Mexico Local Symp., Socorro, NM, USA  
**1987 Jun:** NRAO, VLA Site, NM, USA  
**1986 Nov:** NRAO, VLA Site, NM, USA  
**1986 Oct:** Superluminal Radio Sources, Big Bear, CA, USA  
**1986 Oct:** NRAO Local Symp., Socorro, NM, USA  
**1986 Apr:** University of Toronto, Toronto, Ontario, Canada  
**1986 Feb:** NRAO, VLA Site, NM, USA  
**1985 Oct:** NRAO Local Symp., Socorro, NM, USA  
**1985 Aug:** Workshop on Plasma Processes in Astrophysical Jets, Taos, NM, USA  
**1985 May:** Caltech, Pasadena, CA, USA  
**1985 Mar:** NRAO, VLA Site, NM, USA  
**1985 Mar:** NMIMT, Socorro, NM, USA  
**1984 Dec:** HIA, NRC of Canada, Ottawa, Ontario, Canada  
**1984 Dec:** CfA, Cambridge, MA, USA  
**1984 Aug:** NRL, Washington, DC, USA  
**1984 Aug:** NRAO, Charlottesville, VA, USA  
**1984 Jul:** Workshop on Astrophysics of Active Galaxies and QSOs, Santa Cruz, CA, USA  
**1984 Jun:** University of New Mexico, Albuquerque, NM, USA  
**1983 Jun:** VLBI and Compact Radio Sources, Bologna, Italy  
**1983 Jun:** MPIfR, Bonn, Federal Republic of Germany  
**1983 Jun:** RGO, Herstmonceux Castle, Hailsham, East Sussex, UK  
**1983 Jan:** University of Toronto, Toronto, Ontario, Canada

## 9 Bibliography

### 9.1 Refereed Papers

- Toward Astrometric Constraints on a Supermassive Black Hole Binary in the Early-Type Galaxy NGC 4472, J. M. Wrobel & T. J. W. Lazio, 2022, ApJ, submitted
- Accessing Intermediate-Mass Black Holes in 728 Globular Star Clusters in NGC 4472, J. M. Wrobel, T. J. Maccarone, J. C. A. Miller-Jones, & K. E. Nyland, 2021, ApJ, 918, 18
- VLA Limits on Intermediate-Mass Black Holes in 19 Massive Globular Clusters, J. M. Wrobel & K. E. Nyland, 2020, ApJ, 900, 134
- The Karl G. Jansky Very Large Array Sky Survey (VLASS): science case and survey design, M. Lacy, S. A. Baum, C. J. Chandler, et al. 2020, PASP, 132, 035001
- A Trio of Massive Black Holes Caught in the Act of Merging, X. Lui, et al. 2019, ApJ, 887, 90
- X-ray Properties of Radio-selected Dual Active Galactic Nuclei, A. C. Gross, H. Fu, A. D. Myers, J. M. Wrobel, & S. G. Djorgovski, 2019, ApJ, 883, 50
- Investigating the Candidate Displaced Active Galactic Nucleus in NGC 3115, M. L. Jones, S. Burke-Spolaor, K. Nyland, & J. M. Wrobel, 2019, ApJ, 874, 113
- Intermediate-Mass Black Holes in Globular Cluster Systems, J. M. Wrobel, J. C. A. Miller-Jones, K. E. Nyland, & T. J. Maccarone, 2018, Science with a Next Generation Very Large Array, ASP Conference Series, Vol. 517; ASP Monograph 7; edited by Eric Murphy; p. 743
- The Twisted Radio Structure of PSO J334.2028+01.4075, Still a Supermassive Binary Black Hole Candidate, K. P. Mooley, J. M. Wrobel, M. M. Anderson, & G. Hallinan, 2018, MNRAS, 473, 1388
- A Multi-wavelength Study of the Turbulent Central Engine of the Low-mass AGN hosted by NGC 404, K. Nyland et al. 2017, ApJ, 845, 50
- Star Formation in Nearby Early-Type Galaxies: The Radio Continuum Perspective, K. Nyland, L. M. Young, J. M. Wrobel, et al. 2017, MNRAS, 464, 1029
- A Very Large Array Search for Intermediate-Mass Black Holes in Globular Clusters in M81, J. M. Wrobel, J. C. A. Miller-Jones, & M. J. Middleton, 2016, AJ, 152, 22
- The ATLAS3D Project - XXXI. Nuclear Radio Emission in Nearby Early-Type Galaxies, K. Nyland, L. M. Young, J. M. Wrobel, et al. 2016, MNRAS, 458, 2221
- Binary Active Galactic Nuclei in Stripe 82: Constraints on Synchronized Black Hole Accretion in Major Mergers, H. Fu, J. M. Wrobel, A. D. Myers, S. G. Djorgovski, & L. Yan, 2015, ApJ, 815, L6
- A Stacked Search for Intermediate-Mass Black Holes in 337 Extragalactic Star Clusters, J. M. Wrobel, K. Nyland, & J. C. A. Miller-Jones, 2015, AJ, 150, 120
- Radio-Selected Binary Active Galactic Nuclei from Very Large Array Stripe 82 Survey, H. Fu, A. D. Myers, S. G. Djorgovski, L. Yan, J. M. Wrobel, & A. Stockton, 2015, ApJ, 799, 72

- On the Radio Properties of the Intermediate-Mass Black Hole Candidate ESO 243-49 HLX-1, D. Cseh, N. A. Webb, O. Godet, D. Barret, S. Corbel, M. Coriat, H. Falcke, S. A. Farrell, E. Koerding, E. Lenc, & J. M. Wrobel, 2015, MNRAS, 446, 3268
- Evidence from the Very Long Baseline Array that J1502SE/SW are Double Hotspots, not a Supermassive Binary Black Hole, J. M. Wrobel, R. C. Walker, & H. Fu, 2014, ApJ, 792, L8
- Constraints on Two Active Galactic Nuclei in the Merger Remnant COSMOS J100043.15+020637.2, J. M. Wrobel, J. M. Comerford, & E. Middelberg, 2014, ApJ, 782, 116
- Detection of a High Brightness Temperature Radio Core in the Active-galactic-nucleus-driven Molecular Outflow Candidate NGC 1266, K. Nyland, K. Alatalo, J. M. Wrobel, L. M. Young, R. Morganti, T. A. Davis, P. T. de Zeeuw, S. Deustua, & M. Bureau, 2013, ApJ, 779, 173
- Discovery of a Flat-Spectrum Radio Nucleus in NGC 3115, J. M. Wrobel & K. Nyland, 2012, AJ, 144, 160
- The Absence of Radio Emission from the Globular Cluster G1, J. C. A. Miller-Jones, J. M. Wrobel, G. R. Sivakoff et al., 2012, ApJ, 755, L1
- The Intermediate Mass Black Hole Candidate in the Center of NGC 404: New Evidence from Radio Continuum Observations, K. Nyland, J. Marvil, J. M. Wrobel, L. Young, & B. A. Zauderer, 2012, ApJ, 753, 103
- A Kiloparsec-Scale Binary Active Galactic Nucleus Confirmed by the Expanded Very Large Array, H. Fu, Z. Zhang, R. J. Assef, A. Stockton, A. D. Myers, L. Yan, S. G. Djorgovski, J. M. Wrobel, & D. A. Riechers, 2011, ApJ, 740, L44
- The Candidate Intermediate-Mass Black Hole in the Globular Cluster M54, J. M. Wrobel, J. E. Greene, & L. C. Ho, 2011, AJ, 142, 113
- The Expanded Very Large Array: A New Telescope for New Science, R. A. Perley, C. J. Chandler, B. J. Butler, & J. M. Wrobel, 2011, ApJ, 739, L1 (Special Issue on Early Science with the EVLA)
- Parsec-Scale Localization of the Quasar SDSS J1536+0441A, a Candidate Binary Black Hole System, J. M. Wrobel & A. Laor, 2010, ApJ, 714, L295
- SDSS J1254+0846: A Binary Quasar Caught in the Act of Merging, P. J. Green, A. D. Myers, W. A. Barkhouse, J. S. Mulchaey, V. N. Bennert, T. J. Cox, T. L. Aldcroft, & J. M. Wrobel, 2010, ApJ, 710, 1578
- VLBA Observations of Sub-Parsec Structure in Mrk 231: Interaction between a Relativistic Jet and a BAL Wind, C. Reynolds, B. Punsly, P. Kharb, C. P. O'Dea, & J. M. Wrobel, 2009, ApJ, 706, 851
- Discovery of Radio Emission from the Quasar SDSS J1536+0441, a Candidate Binary Black Hole System, J. M. Wrobel & A. Laor, 2009, ApJ, 699, L22
- Steep-Spectrum Radio Emission from the Low-Mass Active Galactic Nucleus GH 10, J. M. Wrobel, J. E. Greene, L. C. Ho, & J. S. Ulvestad, 2008, ApJ, 686, 838
- Outflow-Dominated Emission from the Quiescent Massive Black Holes in NGC 4621 and NGC 4697, J. M. Wrobel, Y. Terashima, & L. C. Ho, 2008, ApJ, 675, 1041

- Radio Emission on Subparsec Scales from the Intermediate-Mass Black Hole in NGC 4395, J. M. Wrobel & L. C. Ho, 2006, ApJ, 646, L95
- Faint Radio Sources in the NOAO Boötes Field. VLBA Imaging and Optical Identifications, J. M. Wrobel, G. B. Taylor, T. A. Rector, S. T. Myers, & C. D. Fassnacht, 2005, AJ, 130, 923
- Deep VLBI Imaging of Faint Radio Sources in the NOAO Boötes Field, M. A. Garrett, J. M. Wrobel, & R. Morganti, 2005, ApJ, 619, 105
- VLBA Astrometry of Compact Radio Sources in the *Spitzer* First-Look Survey, J. M. Wrobel, M. A. Garrett, J. J. Condon, & R. Morganti, 2004, AJ, 128, 103
- An Attempt to Probe the Radio Jet Collimation Regions in NGC 4278, NGC 4374 (M84), and NGC 6166, C. Ly, R. C. Walker, & J. M. Wrobel, 2004, AJ, 127, 119
- Interferometer Phase Calibration Sources in the Declination Range  $0^\circ$  to  $-30^\circ$ , J. N. Winn, A. R. Patnaik, & J. M. Wrobel, 2003, ApJS, 145, 83
- The Nuclear Regions of the Seyfert Galaxy NGC 4151: Parsec-scale HI Absorption and a Remarkable Radio Jet, C. G. Mundell, J. M. Wrobel, A. Pedlar, & J. F. Gallimore, 2003, ApJ, 583, 192
- Phase Calibration Sources in the Northern Sky at Galactic Latitudes  $|b| < 2.5^\circ$ , J. M. Wrobel, G. B. Taylor, & P. C. Gregory, 2001, AJ, 122, 1669
- The Inner Light-Year of the Nearest Seyfert 1 Nucleus in NGC 4395, J. M. Wrobel, C. D. Fassnacht, & L. C. Ho, 2001, ApJ, 553, L23
- VLBA Observations of a Sample of Nearby FR I Radio Galaxies, C. Xu, S. A. Baum, C. P. O’Dea, J. M. Wrobel, & J. J. Condon, 2000, AJ, 120, 2950
- Accretion Rates onto Massive Black Holes in Four Quiescent Elliptical Galaxies, J. M. Wrobel & J. R. Herrnstein, 2000, ApJ, 533, L111
- Photometric Variability and Astrometric Stability of the Radio Continuum Nucleus in the Seyfert Galaxy NGC 5548, J. M. Wrobel, 2000, ApJ, 531, 716
- Subrelativistic Radio Jets and Parsec-Scale Absorption in Two Seyfert Galaxies, J. S. Ulvestad, J. M. Wrobel, A. L. Roy, A. S. Wilson, H. Falcke, & T. P. Krichbaum, 1999, ApJ, 517, L81
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## 9.4 Books

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## 10 Public Outreach

- Invited expert, NASA's Black Hole Week, 2021
- Takes Three to Tango?, 2014, Mercury
- Single Black Hole May Be Masquerading As a Pair, 2014, Science News
- Black Hole Trio Questioned, 2014, Sky & Telescope
- Merging Galaxies Create a Binary Quasar, 2010, press releases by Chandra, Carnegie, NOAO; YouTube video
- Binary Black Hole Surprises, 2009, NRAO eNews
- Radio Telescopes Provide Key Clue on Black Hole Growth, 2007, invited press release at 209th Meeting of the AAS
- Submissions, 2007, NRAO Image Gallery

## 11 Workforce Development

**2020-:** As editor of a series of ngVLA science articles in the NRAO eNews, I invited contributions from more than 20 PhD candidates, postdocs, and early-career faculty

**2015-2017:** Program Director, Faculty Early Career Development Program, NSF

**2011-2014:** Supervisor, one graduate student at New Mexico Institute of Mining and Technology

**2002-2006:** Founder and Coordinator, Green Bank Telescope Student Support Program

**2001-2014:** Coordinator, VLA observing for university classes or summer programs

**1993:** Lecturer, NRAO Summer School on VLBI and the VLBA

**1991-2010:** Lecturer, NRAO Synthesis Imaging Workshops

**1991:** SOC/LOC Chair, NRAO Synthesis Imaging Workshop

**1986-1990:** Supervisor, two graduate students and two undergraduate students at Mexico Institute of Mining and Technology