

## Curriculum Vitae

**Name:** Lincoln J. Greenhill

**Work Address:** Harvard-Smithsonian Center for Astrophysics  
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**Education:** 1990 Ph.D., Astronomy, Harvard University  
Dissertation: *VLBI Observations of Extragalactic H<sub>2</sub>O masers*  
Supervisor: J. M. Moran  
1985 M.A., Astronomy, Harvard University  
1984 S.B., Physics, Massachusetts Institute of Technology  
Thesis: *Reprocessing of Gamma Ray Burst Radiation on Stellar Surfaces*  
Supervisor: S. A. Rappaport

### Professional Experience

2009 Visiting Professor, Miller Institute for Basic Research in Science, *University of California – Berkeley* (fall semester residence).  
2008 – 2010 Project Scientist, *Murchison Wide-field Array (MWA)*.  
2007 – **Senior Research Fellow, Department of Astronomy, Harvard University.**  
2003 – 2004 Visiting Physicist, *Stanford University*,  
Kavli Institute for Particle Astrophysics and Cosmology (sabbatical).  
2002 – 2011 Lecturer, *Department of Astronomy, Harvard University*.  
2000 – **Radio Astronomer, Smithsonian Astrophysical Observatory.**  
1997 Assistant Director, *Maria Mitchell Observatory*.  
1992 – 2000 Radio Astronomer (term), *Smithsonian Astrophysical Observatory*.  
1990 – 1992 Fellow, Miller Institute for Basic Research in Science, *University of California – Berkeley*. Mentors: C. Townes/W. Welch.  
1984 – 1990 Research Assistant, *Department of Astronomy, Harvard University*.  
1983, 1984 Intern, *General Electric Corporate Research and Development Center*, Schenectady, NY.

### Honors and Awards

Achievement Award, Smithsonian Institution (1997, 2002, 2004)  
Bok Prize, Department of Astronomy, Harvard University, shared (1999)  
Miller Fellowship, University of California, Berkeley (1990–92)  
NASA Graduate Student Research Fellowship (1987–90)  
Phi Beta Kappa (1984)  
Sigma Xi (1984)  
Sigma Pi Sigma (1983)

### Principal Interests

Cosmology — cosmological dark age and epoch of reionization, dark energy, estimation of cosmological parameters. Supermassive black holes — accretion disk geometries, jets, the structures of active galactic nuclei. Star formation — structure and gas dynamics in close proximity to young stars. Late-type variable stars — circumstellar envelopes and mass-loss. Astronomical masers. Interferometry at radio and infrared wavelengths. Signal Processing. Algorithms. High Performance Computing. Massively Parallel GPU computing

## Committees and Service

2013 SAO Submillimeter Array postdoctoral fellow selection committee  
 2012 – **Founding Associate Editor, *Journal of Astronomical Instrumentation (World Scientific)***  
 2011 Organizer: Special Session on Hydrogen Epoch of Reionization Arrays (shared with C.L. Carilli following original effort of D. C. Backer)  
 2010 SOC: International SKA Aperture Array Verification Program  
 2010 – 2012 Board member: Collaboration for Astronomical Signal Process and Electronics Research (CASPER)  
 2010 SOC: CASPER2010: Workshop for New Paths in Heterogeneous Digital Signal Processing  
 2010 SOC: SKA Science in Australasia  
 2008 – 2010 JAXA/ISAS VSOP2 International Science Council, member at large  
 2007 – 2009 Harvard Initiative for Innovative Computing core member, manager for Data Intensive Science  
 2007 – 2009 Science Advisory Group for EVLA  
 2007 GBT Dynamic Scheduling Concept Review Committee  
 2006 – 2010 Square Kilometer Array International Science Working Group  
 2006 NASA Deep Space Network Working Group  
 2005 – 2006 Strategic Science Planning Committee, Harvard-Smithsonian CfA  
 2003 – 2004 NASA Deep Space Network Executive Management Board  
 2002 – 2003 NRAO VLA/VLBA large proposal Skeptical Review Committee  
 2002 National Science Foundation AST Division proposal reviewer  
 2001 CfA Prize Committee (chair)  
 2000 – 2003 AUI Visiting Committee to the NRAO  
 1999 – 2010 U.S. SKA consortium, SAO representative  
 1999 NRAO VLA/VLBA Scheduling Committee  
 1997 – 2000 NRAO Users Committee  
 1997 – 1999 ARISE Space VLBI Science Advisory Committee  
 1997 – 1998 NRAO VLA/VLBA proposal reviewer  
 1996 – 1998 Harvard-Smithsonian CfA Fellowship Selection Committee  
 Referee for *The Astrophysical Journal*, *The Astronomical Journal*, *Nature*, *Astronomy & Astrophysics*, *Monthly Notices of the Royal Astronomical Society*, *Proceedings of the Astronomical Society of Japan*, and *Radio Science*

## Professional Societies

American Astronomical Society  
 Internal Astronomical Union

## Supervision of Student Research

### *Direct*

2012	J. Keller, REU, SciGPU project, Harvard SEAS (with J. Kocz)
2012	A. Patil, summer intern, LEDA project, Smithsonian (with J. Kocz)
2010	N. Sravan, summer intern, MWA project, Smithsonian (with G. Bernardi)
2010	P. LaPlante, REU, Harvard SEAS (with M. Clark)
2009	D. Gothe, REU, SciGPU project, Harvard SEAS (with S. Ord, R. Edgar)
2007 – 2010	R. Harris, Harvard, summer intern, later graduate candidate ( <i>research exam</i> )
2006 – 2009	B. Maruca, Harvard Ph.D. candidate ( <i>research co-advisor years 1, 2</i> )
2006	R. Michney, Dartmouth, undergraduate summer researcher
2002 – 2005	G. Ball, Harvard, Ph.D. candidate
2002 – 2004	M. Modjaz, Harvard, Ph.D. candidate
2000 – 2007	P. Kondratko, Harvard, Ph.D. candidate ( <i>supervisor</i> )
1999 – 2000	A. Seth, SAO astrophysicist/technician
1998 – 2000	I. Zaw, Harvard, undergraduate
1998 – 1999	J. A. Eisner, Harvard, Senior Honors Thesis, Astronomy* ( <i>research advisor</i> )
1998 – 1999	B. P. Holder, technician
1997 – 1999	A. Bragg, Harvard, Ph.D. candidate
1997	C. Schwartz, Colby College, REU intern, Maria Mitchell Observatory
1996 – 2000	A. S. Trotter, Harvard, Ph.D. candidate
1994 – 1997	J. R. Herrnstein, Harvard, Ph.D. candidate
1994	I. Frommer, Harvard, undergraduate

### *Indirect*

2010	SAO predoctoral fellow advisory committee (chair), L. Zhu
2009	Matthias Lee, REU, Harvard School of Engineering and Applied Sciences
2006	External Examiner, doctoral defense, M. Gustafsson, Univ. Århus, DK
2005 – 2006	SAO predoctoral fellow advisory committee, S. Qin
2003 – 2007	Thesis Advisory Committee, P. Kondratko, Harvard
2003 – 2005	Thesis Advisory Committee, G. Ball, Harvard
2001	SAO predoctoral fellow advisory committee (chair), A. Brunthaler
1999 – 2001	Thesis Advisory Committee (chair), S. Ransom, Astronomy (Harvard)
1997	Dissertation Exam Committee, J. Herrnstein, Astronomy (Harvard)
1996 – 2000	Thesis Advisory Committee, A. Trotter, Astronomy (Harvard)

\* Recipient of Goldberg and Hoopes thesis prizes within Department and University.

## Supervision and Hosting of Postdoctoral and Visiting Fellows

2014 –	H. Garsden (Postdoctoral Fellow Harvard)
2013 –	D. Price (Postdoctoral Fellow Harvard)
2013 –	B. Barsdell (Postdoctoral Fellow Harvard)
2011 – 2014	J. Kocz (Postdoctoral Fellow Harvard)

2009 – 2012	G. Bernardi (Postdoctoral Fellow SAO)
2007 – 2009	S. M. Ord (Postdoctoral Fellow SAO)
2006 – 2009	C. Goddi (Postdoctoral Fellow SAO; shared)
2006 – 2009	R. B. Wayth (Postdoctoral Fellow SAO)
2006 – 2009	A. Tilak (Postdoctoral Fellow SAO)
2005 – 2009	D. A. Mitchell (Postdoctoral Fellow SAO)
2005 – 2008	L. D. Matthews (Visiting Scientist SAO)
1999 – 2002	J. D. Monnier (CfA-wide Postdoctoral Fellow; now faculty, U. Michigan)

### Supervision of Scientific Staff

2009 –	D. A. Mitchell (Radio Astronomer, SAO)
2009 –	M. A. Clark (Research Associate, Harvard College Observatory)
2009 – 2010	S. M. Ord (Radio Astronomer, SAO)
2009 – 2010	A. Tilak (Radio Astronomer, SAO)
2008 – 2009	R. G. Edgar (Research Associate, Harvard IIC/SEAS) – partial

### Teaching Experience (Harvard University)

2012	NRAO Synthesis <i>Imaging</i> Workshop, Socorro, NM Invited lectures: “Low-Frequency Interferometry,” and “Radio Telescopes Around the World”
2007/F	Astronomy 98f (Astronomy Junior Tutorial) Lecture for I. Shapiro
2006/F	Astronomy 208 (The Interstellar Medium) Lecture for P. Casselli
2002/S	Astronomy 191 (Astrophysics Laboratory) Lectures for M. Reid and D. Wilner
1999/F	Astronomy 192 (Astronomical Measurements) Lecture for I. Shapiro
1998/S	Astronomy 218 (Radio Astronomy) Lecture for J. Moran
1996/S	Astronomy 97 (Introductory Tutorial) Lecture for J. Moran
1996/F	Astronomy 208 (The Interstellar Medium) Lecture for A. Goodman
1995/S	Astronomy 145 (Topics in Astrophysics) Lecture for A. Goodman
1995/F	Astronomy 145 (Topics in Astrophysics) Lecture for A. Goodman
1993/S	Astronomy 97 (Introductory Tutorial) Lecture for J. Moran
1987/S	Astronomy 145 (Topics in Astrophysics) Assistant to M. Birkinshaw
1986/S	Astronomy 145 (Topics in Astrophysics) Assistant to M. Birkinshaw
1985/F	Astronomy 192 (Astronomical Techniques) Assistant to J. P. Huchra

## Invited Papers, Seminars, and Colloquia

- University of New Mexico, Department of Physics and Astronomy colloquium, “Toward Estimating the Thermal History of the Dark Age,” November 2014 (invited)
- Boston University, Department of Astronomy seminar, “Toward Estimating the Thermal History of the Dark Age,” November 2014 (invited)
- Exascale Radioastronomy, “The Cosmological Dark Age and High Throughput Real-time Computing,” March 2014 (invited)
- International Square Kilometer Array Calibration and Imaging Workshop, “LEDA,” March 2014 (contributed)
- AAS, “LEDA,” 223<sup>rd</sup> meeting, January, 2014 (contributed)
- Yale University, Department of Astronomy colloquium, “Pursuing the Thermal History of the Universe through the End of the Cosmic Dark Ages,” April 2013 (invited)
- CAASTRO Workshop on Reionization, “LEDA,” March 2013 (contributed)
- ICEAA 2012, “A 512-element Full-correlation Sparse Aperture Array,” September 2012 (invited)
- AAS special session on New Horizons for Science from the Moon, “HI at  $z \sim 20$ : the LEDA Array,” June 2012 (contributed)
- Harvard Institute for Applied Computational Science, “Frontier Cosmology and GPU Computing,” April 2012 (invited)
- CalTech Astrophysics Seminar, “Toward Detecting the Universe @  $z \sim 20$  The LEDA array,” February 2012 (invited)
- National Radio Science Meeting, “Large Aperture Experiment to Detect the Dark Ages,” January 2012 (contributed)
- IAU Symposium 287, “Dynamical Detection of a Magnetocentrifugal Wind from a 20  $M_{\odot}$  YSO,” January 2012 (contributed)
- University of Michigan Department of Astronomy Colloquium, “The Transition from the Dark Age to Reionization,” December 2011 (invited)
- Physical Sciences Seminar, IBM Watson Research Center, “Frontier Cosmology and GPU Computing,” December 2011 (invited)
- University of New Mexico, Department of Physics and Astronomy, “Transition from the Dark Ages to Reionization,” December 2011 (invited)
- National Radio Astronomy Observatory Colloquium (Socorro), “Transition from the Dark Ages to Reionization,” December 2011 (invited)
- National Ecological Observatory Network seminar, “Cosmic Dawn,” October 2011 (invited)
- University of Colorado at Boulder, Department of Astronomy Colloquium, “Cosmic Dawn,” October 2011 (invited)
- CASPER2011 Workshop, NCRA, Pune, India, “The Universe at Redshifts  $> 20$ ,” October 2011 (contributed)
- BASP 2011, “GPU-enabled Imaging of an Irregular nonFlat Sky (with Warped Snapshot Imaging),” September 2011 (contributed)
- Asia-Pacific Regional IAU Meeting, “Epoch of Reionization Arrays,” August 2011 (invited)
- Workshop on Novel Telescopes for 21cm Cosmology, “Large Aperture Experiment to Detect the Dark Ages,” June 2011 (contributed)
- International Center for Computational Science, LLBL, “GPU Computing on a New Frontier in Cosmology,” January 2011 (contributed)
- AAS special session on Hydrogen Epoch of Reionization Arrays (HERA): Progress and Planning, “HERA,” January 2011 (invited)

## **Invited Papers, Seminars, and Colloquia**

International SKA Aperture Array Verification Program: “The HERA Programme,” December 2010 (invited)

International SKA Science and Technology Forum 2010: “EOR Study with the MWA – First Glimpses at Foregrounds,” August 2010 (invited)

Aspen Winter Physics School, “MWA Status Report & Paths Forward to SKA,” February 2010 (contributed)

Berkeley - ASIAA Workshop on High Mass Star Formation, “Orion Source I: Opportunity Knocks,” January 2010 (invited)

Institute for Physics, Mathematics and the Universe, Focus Week on Reionization, “Outback Radio Cosmology and the Epoch of Reionization,” December 2009 (invited)

University of Florida, Gainesville, Department of Astronomy Colloquium, “Moving Images of a Massive YSO,” November 2009 (invited)

University of California, Berkeley, Department of Astronomy Colloquium, “Moving Images of Accretion and Outflow for a High-Mass YSO,” November 2009 (invited)

HaRIKEN2009: Application of GPU Computation to Brain Science, Quantum Science, Astronomy, Fluid Dynamics and other sciences, “High Performance Computing as Linchpin in Next-generation Radio Telescopes,” August 2009 (invited)

3<sup>rd</sup> International Workshop on the Connection Between Particle Physics and Cosmology, invited talk, May 2009 (invited)

Harvard Initiative in Innovative Computing colloquium, “High Performance Computing as Linchpin in Next-generation Radio Telescope,” April 2009 (invited)

ANU Research School of Astronomy & Astrophysics colloquium, “First Steps to the Dark Age,” January 2009 (invited)

Sackler Conference on 21 cm Cosmology, “21cm Computing Challenges,” invited talk, May 2008

Massive Star Formation: Observations Confront Theory, invited talk, September 2007

IAU Symposium 242, Alice Springs, Australia, invited review, March 2007

The History of Nuclear Black Holes in Galaxies, Cambridge, MA, invited overview, March 2007

AAS special session on the Epoch of Reionization, Washington, DC, invited talk, January 2006

New Techniques and Results in Low Frequency Radio Astronomy, Hobart, Tasmania, invited review, December 2005

International Union of Radio Science meeting, Boulder, CO, invited talk, January 2005

Oxford University, Astrophysics Seminar, March 2004

Center for Star Formation Research, NASA/Ames, invited talk, January 2004

Stanford University, Astronomy-CSSA Seminar, December 2003

University of California, Berkeley, Radio Astronomy Laboratory Seminar, December 2003

University of Toronto, Department of Astronomy colloquium, October 2003

Future Directions in High Resolution Astronomy, Socorro, NM, invited review, June 2003

Stanford University, Astronomy-CSSA Seminar, March 2003

Meeting on The Centers of Galaxies, Schloss-Ringberg, Germany, invited paper, November 2002

AAS topical session on The New Radio Universe, Albuquerque, NM, invited review, June 2002

IAU Symposium 206, Mangaratiba, Brazil, invited review, March 2001

European VLBI Network Symposium 2000, Gothenburg, Sweden, invited review, July 2000

AAS topical session on Supermassive Black Holes, Rochester, NY, invited review, June 2000

Harvard-Smithsonian Center for Astrophysics colloquium, May 1999

International Union of Radio Science meeting, Boulder, CO, invited paper, January 1998

University of Colorado, Boulder, Department of Astronomy colloquium, December 1997

California Institute of Technology, Department of Astronomy colloquium, April 1997

### **Invited Papers, Seminars, and Colloquia**

Lawrence Livermore Laboratory, IGPP Seminar, April 1997  
NOAO/KPNO/NSO/Steward Obs./NRAO colloquium, April 1997  
Max-Planck-Institut für Radioastronomie colloquium, September 1996  
IAU Colloquium 159 on Emission Lines in Active Galaxies: New Methods, Shanghai, June 1996  
University of British Columbia, Department of Physics colloquium, February 1996  
University of New Mexico, Department of Physics and Astronomy colloquium, January 1996  
University of California, Berkeley, Department of Astronomy colloquium, September 1995  
Symposium on The Physics of LINERS in View of Recent Observations, STScI, September 1995  
Massachusetts Institute of Technology, Astrophysics colloquium, December 1994  
Massachusetts Institute of Technology, Astrophysics colloquium, December 1993

### **Public Talks, Invited Lectures, and Video**

Science for the Public lecture, Belmont Media Center and Library, May 2015 (booked)  
“The Dark Age of the Universe,” evening public lecture  
University of Florida, Gainesville, November 2009  
“The End of the Astronomical Dark Ages,” evening public lecture  
Smithsonian Astrophysical Observatory traveling exhibit (video), 2009–2012  
Black Holes: Space Warps & Time Twists – video guide for “Black Hole Adventure”  
  
University of Tasmania, Hobart, Australia, December 2005  
“When the First Stars Formed,” an evening public lecture  
Summer Science Program, Ojai, CA, August 2003  
“Brobdingnagian Black Holes in the Centers of Galaxies”  
Massachusetts Institute of Technology, Cambridge, MA, November 2001  
“Evidence for Supermassive Black Holes,” an evening lecture to Physics students  
Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, November 1999  
“Black Holes of Brobdignagian Proportions,” part of *Observatory Night* monthly series

### **Contracts and Grants**

Greenhill, L. J., Tong, E.  
“Dark-age All-sky Radio Camera (DARC): Development and Science,” SAO (\$47,520)  
*active*  
Greenhill, L. J.  
“Lifting the Veil of Terrestrial Radio Interference to Chase Cosmic Dawn,” SI  
(\$54,037) *active*  
**Greenhill, L. J., Werthimer, D., Taylor, G. B., and Ellingson, S. W. (Greenhill lead PI)**  
“Collaborative Research: Large Aperture Experiment to Detect the Dark Ages  
(LEDA),” NSF (\$761,775; \$1,915,223 total) *active*  
**Aspuru-Guzik, A., Greenhill, L. J., and Pfister, H.**  
“CDI Type II: Bridging the Computational Semantic Gap: A Demand-Driven  
Framework for Portal-Based Chemistry, Astronomy and Neurobiology,” NSF  
(\$585,258; \$2,100,000 total) *active*  
**Greenhill, L. J. and Brower, R. (Brower lead PI)**  
“Collaborative Research: Scalable Hierarchical Algorithms for Extreme  
Computing (SHARE),” NSF (\$230,755; \$604,843 total) *active*  
Greenhill, L. J., Weintraub, J., and Moran, J. M.

- “CASPER2010: Workshop for New Paths in Heterogeneous Digital Signal Processing,” NSF (\$20,000) *closed*
- Ord, S. M., Mitchell, D. A., and Greenhill, L. J.  
 “2Pi Processor for Pulsar and Transient Science,” SAO (\$115, 560) *closed*
- Pfister, H., Aspuru-Guzik, A., and Greenhill, L. J.**  
**“CDI Type II: Scientific Computation for Astronomy, Neurobiology and Chemistry using Graphics Processing Units and Solid-State Storage,” NSF (\$455,855; \$2,000,251 total) *closed***
- Greenhill, L. J.  
 “Identification of Anchor Galaxies for Constraint on Dark Energy through Measurement of Maser Distances” SAO (\$59,747) *closed*
- Nowak, M. A., Markoff, S., Canizares, C., Reynolds, C. R., Chiang, J., Greenhill, L., Young, A., and Wilms, J.  
 “The Definitive Chandra Observations of NGC4258,” NASA (\$48,286) *closed*
- Lonsdale, C. J., Hewitt, J. N., Salah, J. E., and Greenhill, L. J.  
 “Mileura Wide-Field Array Science and Technology Demonstrator”  
 NSF (\$913,204; \$5,240,245 total ) *closed*
- Greenhill, L. J., Humphreys, E.M.L., and Chandler, C. J.  
 “What Does High-Mass Star Formation ‘Look’ Like? Movies of Accretion and Outflow 10–1000 AU from a Massive YSO,” NSF (\$575,239) *closed*
- Greenhill, L. J. and Blundell, R.  
 “Mapping EoR Structures Present During the Epoch of Reionization II,” SAO (\$163,947) *closed*
- Kondratko, P. T., Greenhill, L. J., Moran, J. M., Lovell, J., Kuiper, T., and Jauncey, D. L.  
 “Monitoring of Five NGC4258-like Water Megamasers Discovered with the GBT and the DSN II,” NRAO-GBT (\$35,000) *closed*
- Greenhill, L. J. and Blundell, R.  
 “Mapping EoR Structures Present During the Epoch of Reionization,” SAO (\$157,178) *closed*
- Greenhill, L., Madejski, G., Wilson, A., Henkel, C., and Kondratko, P.  
 “Masers as Beacons of Compton Thick AGN-Implications for X-ray Background Studies,” NASA-XMM (\$75,911) *closed*
- Greenhill, L. J., Bersier, D., Macri, L. M., Reid, M. J., and Stanek, K.  
 “Accurate and Robust Calibration of the Extragalactic Distance Scale with the Maser Galaxy NGC4258 II,” NASA-HST (\$69,892; \$184,130 total) *closed*
- Kondratko, P. T., Greenhill, L. J., Moran, J. M., Lovell, J., Kuiper, T., and Jauncey, D. L.  
 “Monitoring of Five NGC4258-like Water Megamasers Discovered with the GBT and the DSN,” NRAO-GBT (\$28,463) *closed*
- Greenhill, L. J., Elvis, M., Fabbiano, G., Madejski, G., Ellingsen, S., McCallum, J., and Lovell, J.  
 “Chandra Study of H<sub>2</sub>O Megamaser AGN: Do Type-2 Objects Form a Heterogeneous Class?” (NASA-CXO) (\$48,200) *closed*
- Greenhill, L. J.  
 “GBT Water Maser Survey of Herbig Ae/Be Stars,” NRAO-GBT (\$2,600) *closed*
- Greenhill, L. J., Bersier, D., Macri, L. M., Reid, M. J., and Stanek, K.  
 “Accurate and Robust Calibration of the Extragalactic Distance Scale with the Maser Galaxy NGC4258,” NASA-HST (\$53,256; \$155,092 total) *closed*
- Greenhill, L. J. and Wilner, D. J.



- “Square Kilometer Array Development,” SAO (\$11,000) *closed*
- Greenhill, L. J., Madejski, G., McGregor, P. J., Ellingsen, S. P., and Moran, J. M.  
 “Is There an AGN in the ‘Normal’ Galaxy IRASF01063-8034?” NASA-XMM  
 (\$42,900 total) *closed*
- Greenhill, L. J. et al.  
 “Detection of AGN in Apparently Normal Galaxies,” NRAO-GBT (\$24,390) *closed*
- Greenhill, L. J., Goodman, A. A., & Gaensler, B. M.  
 “SKA R&D: The Use of Fiber Optic Networks and the Design of a Polarization Capable  
 Interferometer,” NSF-AST (\$60,160) *closed*
- Greenhill, L. J. and Moran, J. M.  
 “All-sky Megamaser Survey: Accretion Disks and Supermassive Blackholes,”  
 SAO (\$15,700) *closed*
- Reid, M. J., Greenhill, L. J., and Moran, J. M.  
 “Measurement of Precision Geometric Distances to Three Anchor Points in the Local  
 Universe,” NASA OSS-SARA (\$210,000) *closed*
- Greenhill, L. J., Moran, E. C., Filippenko, A. V., Moran, J. M., Herrnstein, J. R.  
 “Multi-epoch XMM Observations of NGC4258,” NASA-XMM (\$44,300) *closed*
- Greenhill, L. J. and Moran, J. M.  
 “H<sub>2</sub>O Megamasers, Accretion Disks, and Supermassive Blackholes,” SAO (\$75,000)  
*closed*
- Moran, J. M. and Greenhill, L. J.  
 “Sources of Outflow in the Orion BN/KL Region,” SI-SSP (\$35,000) *closed*
- Madejski, G., Done, C., Zycki, P., Greenhill, L., Moran, J., and Herrnstein, J.  
 “X-ray Observations of the Megamaser Seyfert 2 Galaxy NGC 4945,” NASA-AXAF  
 (\$20,000) *closed*
- Moran, J. M., Genzel, R., Quirrenbach, A., Greenhill, L. J., Menten, K., Drapatz, S., Kegel, W.,  
 and Lo, K.-Y.  
 “High Spectral Resolution Observations of Megamaser Galaxies,” NASA-ISO (\$50,000)  
*closed*
- Reid, M. J., Greenhill, L. J., Menten, K. M., and Moran, J. M.  
 “The Nuclear Jet in M87,” NASA-VSOP (\$245,300) *closed*
- Cecil, G., DePree, C., Greenhill, L. J., and Moran, J. M.  
 “The Helical Jet/ISM Interaction in NGC 4258,” NASA-HST (\$9,000) *closed*

## **Bibliography**

### **Dissertation, Thesis, and Reports**

- 1983 Greenhill, L. J. and Dakin, J. T., High Pressure Sodium Lamps in the Red and Near-Infrared, General Electric Co. Technical Report.
- 1984 Greenhill, L. J., On Optical Counterparts of Cosmic Gamma-Ray Bursts, S.B. Thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts.
- 1986 Greenhill, L. J., VLBI Mapping of 43 GHz SiO Emission Associated with IRC2 in

## Bibliography

### Dissertation, Thesis, and Reports

Orion-KL, second year exam, Harvard University, Cambridge, Massachusetts.

- 1990 Greenhill, L. J., Observations of Extragalactic Water Vapor Masers, Ph.D. Dissertation, Harvard University, Cambridge, Massachusetts.

### Articles in Refereed Journals (131)

- 1989 McIntosh, G. C., Predmore, C. R., Moran, J. M., Greenhill, L. J., Reid, M. J., Rogers, A. E. E., and Barvanis, R. E. "VLBI and Polarimetric Observations of the SiO Masers in R Cassiopeia," *Ap. J.*, **337**, 934.
- 1990 Greenhill, L. J., Moran, J. M., Reid, M. J., Gwinn, C. R., Menten, K. M., Eckart, A., and Hirabayashi, H., "VLBI Observations of H<sub>2</sub>O Masers in the Galaxy M33," *Ap. J.*, **364**, 513.
- 1992 Bester, M., Danchi, W.C., Degiacomi, C. G., Greenhill, L. J., and Townes, C. H., "Atmospheric Fluctuations – Structure Functions and Projected Performance of Future Instruments," *Ap. J.*, **392**, 357.
- 1993 Greenhill, L. J., Moran, J. M., Reid, M. J., Menten, K. M., and Hirabayashi, H., "Microarcsecond Proper Motions of Extragalactic Water Vapor Masers in M33," *Ap. J.*, **406**, 482.
- 1994 Argon, A. L., Greenhill, L. J., Moran, J. M., Reid, M. J., Menten, K. M., Henkel, C., and Inoue, M., "The Angular Structure and Intraday Variability of a Water Vapor Maser in IC10," *Ap. J.*, **422**, 586.
- 1994 Danchi, W. C., Bester, M., Degiacomi, C. G., Greenhill, L. J., and Townes, C. H., "Characteristics of Dust Shells Around 13 Late-type Stars," *Astron. J.*, **107**, 1469.
- 1994 Rogers, A. E. E., Doeleman, S., Wright, M. C. H., Bower, G. C., Backer, D. C., Padin, S., Phillips, J. A., Emerson, D., Greenhill, L. J., Moran, J. M., and Kellermann, K. I., "Small Scale Structure of Sgr A\* from VLBI at 3 mm Wavelength," *Ap. J. (Lett.)*, **434**, 59.
- 1994 Townes, C. H., Bester, M., Danchi, W. C., Degiacomi, C. G., and Greenhill, L. J., "An IR Spatial Interferometer at 10  $\mu$ m Wavelength and Measurement of Stellar Dust Shells," *IR Phys. Tech.*, **5**, 503.
- 1995 Greenhill, L. J., Jiang, D. R., Moran, J. M., Reid, M. J., Lo, K.-Y., and Claussen, M. J., "Detection of a Subparsec Diameter Disk in the Nucleus of NGC 4258," *Ap. J.*, **440**, 619.
- 1995 Greenhill, L. J., Colomer, F., Moran, J. M., Backer, D. C., Danchi, W. C., and Bester,

### Articles in Refereed Journals (131)

- M., “Interferometric Observations of the SiO Masers and Dust Shell of VX Sagittarii,” *Ap. J.*, **449**, 365.
- 1995 Greenhill, L. J., Henkel, C., Becker, R., Wilson, T. L., and Wouterloot, J. G. A., “Centripetal Acceleration within the Subparsec Nuclear Maser Disk of NGC 4258,” *Astron. and Astrophys.*, **304**, 21.
- 1995 Miyoshi, M., Moran, J. M., Herrnstein, J. R., Greenhill, L. J., Nakai, N., Diamond, P. J., and Inoue, M., “Evidence for a Massive Black Hole from High Rotation Velocities in a Sub-parsec Region of NGC 4258,” *Nature*, **373**, 127.
- 1995 Koekemoer, A. M., Henkel, C., Greenhill, L. J., Dey, A., van Breugel, W., Codella, C., and Antonucci, R., “A Water-Vapour Giga-Maser in the Active Galaxy TXFS2226–184,” *Nature*, **378**, 697.
- 1996 Herrnstein, J. R., Greenhill, L. J., and Moran, J. M., “The Warp in the Subparsec Molecular Disk in NGC 4258 as an Explanation for Persistent Asymmetries in the Maser Spectrum,” *Ap. J. (Lett.)*, **468**, L17.
- 1996 Greenhill, L. J., Gwinn, C. R., Antonucci, R., and Barvainis, R., “VLBI Imaging of Water Maser Emission from the Nuclear Torus of NGC 1068,” *Ap. J. (Lett.)*, **472**, L21.
- 1997 Greenhill, L. J., Ellingsen, S. P., Norris, R. P., Gough, R. G., Sinclair, M. W., Moran, J. M., and Mushotzky, R., “Extremely Rapid Variations of Water Maser Emission from the Circinus Galaxy,” *Ap. J. (Lett.)*, **474**, L103.
- 1997 Herrnstein, J. R., Moran, J. M., Greenhill, L. J., Diamond, P. J., Miyoshi, M., Nakai, N., and Inoue, M., “Discovery of a Subparsec Jet 4000 Schwarzschild Radii Away from the Central Engine of NGC 4258,” *Ap. J. (Lett.)*, **475**, L17.
- 1997 Greenhill, L. J., Moran, J. M., and Herrnstein, J. R., “The Distribution of H<sub>2</sub>O Maser Emission in the Nucleus of NGC 4945,” *Ap. J. (Lett.)*, **481**, L23.
- 1997 Trotter, A. S., Moran, J. M., Greenhill, L. J., Zheng, X. W., and Gwinn, C. R., “VLBA Imaging of the OH Maser in III Zw 35,” *Ap. J. (Lett.)*, **485**, L79.
- 1997 Greenhill, L. J., Herrnstein, J. R., Moran, J. M., Menten, K. M., and Velusamy, T., “A Search for H<sub>2</sub>O Maser Emission Toward Active Galactic Nuclei: Discovery of a Nuclear Maser Source in NGC 3735,” *Ap. J. (Lett.)*, **486**, L15.
- 1997 Lopez, B., Danchi, W. C., Bester, M., Hale, D. D. S., Lipman, E. A., Monnier, J. D., Tuthill, P. G., Townes, C. H., Degiacomi, C. G., Geballe, T. R., Greenhill, L. J., Cruzalebes, P., Lefevre, J., Mekarina, D., Mattei, J. A., Nishimoto, D., and Kervin, P. W., “Nonspherical Structures and Temporal Variations in the Dust Shell of o Ceti Observed with a Long Baseline Interferometer at 11 Microns,” *Ap. J.*, **488**, 807.

### Articles in Refereed Journals (131)

- 1998 Doeleman, S. S., Lonsdale, C. J., and Greenhill, L. J., “VLBI Imaging of the 86 GHz SiO Maser Emission in the Circumstellar Envelope of VX Sagittarii,” *Ap. J.* **494**, 400.
- 1998 Herrnstein, J. R., Greenhill, L. J., Moran, J. M., Diamond, P. J., Inoue, M., Nakai, N., and Miyoshi, M., “VLBA Continuum Observations of NGC 4258: Constraints on an Advection-Dominated Accretion Flow,” *Ap. J. (Lett.)*, **497**, 69.
- 1998 Herrnstein, J. R., Moran, J. M., Greenhill, L. J., Blackman, E. G., and Diamond, P. J., “Polarimetric Observations of the Masers in NGC 4258: An Upper Limit on the Large-Scale Magnetic Field 0.2 Parsecs from the Central Engine,” *Ap. J.*, **508**, 243.
- 1998 Trotter, A. S., Greenhill, L. J., Moran, J. M., Reid, M. J., Irwin, J. A., and Lo, K.-Y., “Water Maser Emission and the Parsec-Scale Jet in NGC 3079,” *Ap. J.*, **495**, 740.
- 1998 Greenhill, L. J., Gwinn, C. R., Schwartz, C., Moran, J. M., and Diamond, P. J., “Coexisting Conical Bipolar and Equatorial Outflows from a High-Mass Protostar,” *Nature*, **396**, 650.
- 1999 Herrnstein, J. R., Moran, J. M., Greenhill, L. J., Diamond, P. J., Inoue, M., Nakai, N., Miyoshi, M., Henkel, C., and Riess, A., “A Geometric Distance to the Galaxy NGC 4258 from Orbital Motions in a Nuclear Gas Disk,” *Nature*, **400**, 539.
- 1999 Moran, J. M., Greenhill, L. J., and Herrnstein, J. R., “Observational Evidence for Massive Black Holes in the Centers of Active Galaxies,” proceedings of conference, *Black Holes and Relativity*, Bangalore, India, December 1997. *J. Astrophys. & Astron.*, **20**, 165.
- 1999 Mashedier, M. R. W., van Langevelde, H. J., Richards, A. M. S., Greenhill, L., and Gray, M. D. “VLBI Observations of OH stars: S Persei,” *New Astr. Rev.*, **43** (8-10), 563-567.
- 2000 Bragg, A. E., Greenhill, L. J., and Moran, J. M., “Accelerations of Water Masers in NGC 4258,” *Ap. J.*, **535**, 73.
- 2000 Patel, N. A., Greenhill, L. J., Herrnstein, J. R., Zhang, Q., Moran, J. M., Ho, P. T. P., and Goldsmith, P. F., “Proper Motions of Water Masers Associated with IRAS 21391+5802,” *Ap. J.*, **538**, 268.
- 2000 Cecil, G., Greenhill, L. J., DePree, C. G., Nagar, N., Wilson, A. S., Dopita, M. A., Pérez-Fournon, I., Argon, A. L., and Moran, J. M., “The Active Jet in NGC 4258 and its Associated Shocks,” *Ap. J.*, **536**, 675.
- 2001 Torrelles, J. M., Patel, N. A., Gómez, J. F., Ho, P. T. P., Rodríguez, L. F., Anglada, G., Garay, G., Greenhill, L. J., Curiel, S., and Cantó, J., “Spherical Episodic Ejection

### Articles in Refereed Journals (131)

- of Material from a Young Star,” *Nature*, **411**, 277.
- 2001 Ransom, S. M., Greenhill, L. J., Herrnstein, J. R., Manchester, R. N., Camilo, F., Eikenberry, S. S., Lyne, A. G., “A Binary Millisecond Pulsar in Globular Cluster NGC 6544,” *Ap. J.*, **546**, L25.
- 2002 Curiel, S., Trinidad, M. A., Cantó, J., Rodríguez, L. F., Torrelles, J. M., Ho, P. T. P., Patel, N. A., Greenhill, L., Gómez, J. F., Garay, G., Hernández, L., Contreras, M. E., Anglada, G., “Detection of a Candidate for the Exciting Source of the Expanding Water Maser Bubble in Cepheus A,” *Ap. J.*, **564**, 35.
- 2002 Greenhill, L. J., Ellingsen, S. P., Norris, R. P., McGregor, P. J., Gough, R. G., Sinclair, M. W., Rayner, D. P., Phillips, C. J., Herrnstein, J. R., and Moran, J. M., “A Search for H<sub>2</sub>O Maser Emission in Southern AGN and Star Forming Galaxies – Discovery of a Maser in the Edge-on Galaxy IRAS F01063-8034,” *Ap. J.*, **565**, 836.
- 2002 Monnier, J. D., Greenhill, L. J., Tuthill, P. G., and Danchi, W. C. “Radio Properties of Pinwheel Nebulae,” *Ap. J.*, **566**, 399.
- 2002 Eisner, J. A., Greenhill, L. J., Herrnstein, J. R., Moran, J. M., and Menten, K. M. “Outflow 20–2000 AU from a High-Mass Protostar in W51-IRS2,” *Ap. J.*, **569**, 334.
- 2002 Greenhill, L. J. “ $\epsilon$  Eridani,  $\nu$ Andromedae, 51 Pegasi, HD 209458, HD 196050,” *IAU Circulars*, **7985**, 1.
- 2002 Seth, A. C., Greenhill, L. J., and Holder, B. P. “Water Masers as Tracers of Protostellar Disks and Outflows in the Intermediate Mass Star Forming Region NGC 2071,” *Ap. J.*, **581**, 325.
- 2002 Henkel, C., Braatz, J. A., Greenhill, L. J., and Wilson, A. S., “Discovery of water vapor megamaser emission from Mrk 1419 (NGC 2960): An analogue of NGC 4258?” *A&A*, **394**, L23.
- 2003 Greenhill, L. J., Kondratko, P. T., Lovell, J. E. J., Kuiper T. B. H., Moran, J. M., Jauncey, D. L., and Baines, G. A. “The Discovery of H<sub>2</sub>O Maser Emission in Seven AGN and at High Velocities in the Circinus Galaxy,” *Ap. J.*, **582**, L11.
- 2003 Done, C., Madejski, G. M., Zycki, P. T., and Greenhill, L. J. “Simultaneous Chandra and Rossi X-ray Timing Explorer Observations of the Nearby Bright Seyfert 2 Galaxy, NGC 4945,” *Ap. J.*, **588**, 763.
- 2003 Greenhill, L. J., Booth, R. S., Ellingsen, S. P., Herrnstein, J. R., Jauncey, D. L., McCulloch, P. M., Moran, J. M., Norris, R. P., Reynolds, J. E., and Tzioumis, A. K., “A Warped Accretion Disk and Wide Angle Outflow in the Inner Parsec of the Circinus Galaxy,” *Ap. J.*, **590**, 162.
- 2004 Ransom, S. M., Stairs, I. H., Backer, D. C., Greenhill, L. J., Bassa, C. G.,

### Articles in Refereed Journals (131)

- Hessels, J.W. T., and Kaspi, V. M., “Green Bank Telescope Discovery of Two Binary Millisecond Pulsars in the Globular Cluster M30,” *Ap. J.*, **604**, 328.
- 2004 Greenhill, L. J., Gezari, D. Y., Danchi, W. C., Najita, J., Monnier, J. D., and Tuthill, P. G., “High Angular Resolution Mid-infrared Imaging of Young Stars in Orion BN/KL,” *Ap. J.*, **605**, L57.
- 2004 Romani, R. W., Sowards-Emmerd, D., Greenhill, L., and Michelson, P., “Q0906+6930: The Highest-Redshift Blazar,” *Ap. J. (Lett.)*, **610**, L9.
- 2004 Beuther, H., Zhang, Q., Greenhill, L. J., Reid, M. J., Wilner, D. J., Keto, E., Marrone, D., Ho, P. T. P., Moran, J. M., Rao, R., Shinnaga, H., Liu, S.-Y., “Sub-arcsecond, Sub-mm Continuum Observations of Orion-KL,” *Ap. J. (Lett.)*, **616**, L23.
- 2004 Braatz, J. A., Henkel, C., Greenhill, L. J., Moran, J. M., and Wilson, A. S., “A Green Bank Telescope Search for Water Masers in Nearby Active Galactic Nuclei,” *Ap. J. (Lett.)*, **617**, L29.
- 2004 Argon, A. L., Greenhill, L. J., Moran, J. M., Reid, M. J., Menten, K. M., and Inoue, M., “The IC133 Water Vapor Maser in the Galaxy M33: A Geometric Distance,” *Ap. J.*, **615**, 702.
- 2004 Greenhill, L. J., “Extragalactic Water Masers, Geometric Estimation of  $H_0$  and Characterization of Dark Energy,” *Science with the Square Kilometer Array*, eds. C. Carilli and S. Rawlings, *New Astronomy Reviews*, **48**, 1079.
- 2004 Rawlings, S., Abdalla, F. B., Bridle, S. L., Blake, C. A., Baugh, C. M., Greenhill, L. J., and van der Hulst, J. M., “Galaxy Evolution and Cosmology with the Square Kilometre Array,” *Science with the Square Kilometer Array*, eds. C. Carilli and S. Rawlings, *New Astronomy Reviews*, **48**, 1013.
- 2004 Morganti, R., Greenhill, L. J., Peck, A. B., Jones, D. L., Henkel, C., “Disks, Tori, and Cocoon: Emission and Absorption Diagnostics of AGN Environments,” *Science with the Square Kilometer Array*, eds. C. Carilli and S. Rawlings, *New Astronomy Reviews*, **48**, 1195.
- 2004 Kondratko, P. T., Greenhill, L. J., and Moran, J. M., “Evidence for a Geometrically Thick Self-Gravitating Accretion Disk in NGC 3079,” *Ap. J.*, **618**, 618-634.
- 2005 Brunthaler, A., Reid, M. J., Falcke, H., Greenhill, L. J., and Henkel, C., “The Geometric Distance and Proper Motion of the Triangulum Galaxy (M33),” *Science*, **307**, 1440-1443.
- 2005 Modjaz, M., Moran, J. M., Kondratko, P. T., and Greenhill, L. J., “Probing the Magnetic Field at Sub-Parsec Radii in the Accretion Disk of NGC 4258,” *Ap. J.*, **626**, 104-119.

### Articles in Refereed Journals (131)

- 2005 Fruscione, A., Greenhill, L. J., Filippenko, A. V., Moran, J. M., Herrnstein, J. R., and Galle, E., "X-Ray Luminosity and Absorption Column Fluctuations in the H<sub>2</sub>O Maser Galaxy NGC 4258 from Weeks to Years," *Ap. J.*, **624**, 103-117.
- 2005 Herrnstein, J. R., Moran, J. M., Greenhill, L. J., and Trotter, A. S., "The Geometry of and Mass Accretion Rate through the Maser Accretion Disk in NGC 4258," *Ap. J.*, **629**, 719-738.
- 2005 McCallum, J. N., Ellingsen, S. P., Jauncey, D. L., Lovell, J. E. J., and Greenhill, L. J., "Scintillation in the Circinus Galaxy H<sub>2</sub>O Megamasers," *Ap. J.*, **629**, 1231-1236.
- 2005 Beuther, H., Zhang, Q., Greenhill, L. J., Reid, M. J., Wilner, D., Keto, E., Shinnaga, H., Ho, P. T. P., Moran, J. M., Liu, S. Y., and Chang, C. M., "Line Imaging of Orion KL at 865  $\mu$ m with the Submillimeter Array," *Ap. J.*, **632**, 355-370.
- 2005 Humphreys, E. M. L., Greenhill, L. J., Reid, M. J., Beuther, H., Moran, J. M., Gurwell, M., Wilner, D. J., and Kondratko, P. T., "First Detection of Millimeter/Submillimeter Extragalactic H<sub>2</sub>O Maser Emission," *Ap. J. (Lett.)*, **634**, L133-L136.
- 2006 Madejski, G., Done, C., Zycki, P. T., and Greenhill, L., "X-Ray Emission from Megamaser Galaxy IC2560," *Ap. J.*, **636**, 75-82.
- 2006 Kondratko, P. T., Greenhill, L. J., Moran, J. M., Lovell, J. E. J., Kuiper, T. B. H., Jauncey, D. L., Cameron, L. Gómez, J. F., Garcia-Miró, C., Moll, E., de Gregorio-Monsalvo, I., and Jiménez-Bailón, E., "Discovery of Water Maser Emission in Eight AGNs with 70 m Antennas of NASA's Deep Space Network," *Ap. J.*, **638**, 100-105.
- 2006 Zhang, J. S., Henkel, C., Kadler, M., Greenhill, L. J., Nagar, N., Wilson, A. S., and Braatz, J. A., "Extragalactic H<sub>2</sub>O Masers and X-Ray Absorbing Column Densities," *A&A*, **450**, 933-944.
- 2006 Kondratko, P. T., Greenhill, L. J., and Moran, J. M., "The Discovery of Water Maser Emission in Five AGN and a Possible Correlation Between Water Maser and Nuclear 2-10 keV Luminosities," *Ap. J.*, **652**, 136-145.
- 2006 Macri, L. M., Stanek, K. Z., Bersier, D. F., Greenhill, L. J., and Reid, M. J., "A New Cepheid Distance to the Maser-Host Galaxy NGC4258 and Its Implications for the Hubble Constant," *Ap. J.*, **652**, 1133-1149.
- 2006 Brunthaler, A., Henkel, C., de Blok, W. J. G., Reid, M. J., Greenhill, L. J., and Falcke, H., "Water Masers in the Local Group of Galaxies," *A&A*, **457**, 109-114.
- 2007 Argon, A. L., Greenhill, L. J., Reid, M. J., Moran, J. M., and Humphreys, E. M. L., "Toward a New Distance to the Active Galaxy NGC4258: VLBI Monitoring of Water

### Articles in Refereed Journals (131)

- Maser Emission,” *Ap. J.*, **659**, 1040-1062.
- 2007 Reid, M. J., Menten, K. M., Greenhill, L. J., and Chandler, C. J., “Imaging the Ionized Disk of the High-Mass Protostar Orion-I,” *Ap. J.*, **664**, 950-955.
- 2007 Pellegrini, S., Siemiginowska, A., Fabbiano, G., Elvis, M., Greenhill, L., Soria, R., Baldi, A., and Kim, D. W., “A Deep Chandra, VLA, and Spitzer IRAC Study of the Very Low Luminosity Nucleus of the Elliptical NGC821,” *Ap. J.*, **677**, 749-759.
- 2008 Humphreys, E. M. L., Reid, M. J., Greenhill, L. J., Moran, J. M., and Argon, A. L., “Toward a New Distance to the Active Galaxy NGC4258: Centripetal Accelerations and Investigation of Spiral Structure,” *Ap. J.*, **672**, 800-816.
- 2008 Kondratko, P. T., Greenhill, L. J., and Moran, J. M., “Parsec-Scale Accretion Disk in NGC3393,” *Ap. J.*, **678**, 87-95.
- 2008 Tilak, A., Greenhill, L. J., Done, C., and Madejski, G., “A Deep 0.3-10 keV Spectrum of the H<sub>2</sub>O Maser Galaxy IC2560,” *Ap. J.*, **678**, 701-711.
- 2008 Mitchell, D. A., Greenhill, L. J., Wayth, R. B., Sault, R. J., Morales, M. F., and Ord, S. M., “Real-time Calibration of the Murchison Wide-Field Array,” *IEEE JSTSP*, **2**, 707-717.
- 2008 Greenhill, L. J., Tilak, A., and Madejski, G., “Prevalence of High X-Ray Obscuring Columns among AGN that Host Water Masers,” *Ap. J. (Lett.)*, **686**, L13-L16.
- 2008 Dijkstra, M., Lidz, A., Pritchard, J. R., Greenhill, L. J., Mitchell, D. A., Ord, S. M., and Wayth, R. B., “On the Detectability of the Hydrogen 3-cm Fine-Structure Line from the Epoch of Reionization,” *MNRAS*, **390**, 1430-1436.
- 2009 Yang, Y., Wilson, A. S., Matt, G., Terashima, Y., and Greenhill, L. J., “Suzaku Observations of the Circinus Galaxy,” *Ap. J.*, **691**, 131-139.
- 2009 Goddi, C., Greenhill, L. J., Humphreys, E. M. L., Matthews, L. D., Tan, J. C., and Chandler, C. J., “A 42.3-43.6 GHz Spectral Survey of Orion BN/KL: First Detection of the  $v=0$   $J=1-0$  Line from the Isotopologues <sup>29</sup>SiO and <sup>30</sup>SiO,” *Ap. J.*, **691**, 1254-1264.
- 2009 Reid, M. J., Braatz, J. A., Condon, J. J., Greenhill, L. J., Henkel, C., and Lo, K. Y., “The Megamaser Cosmology Project: I. VLBI observations of UGC 3789,” *Ap. J.*, **695**, 287-291.
- 2009 Riess, A. G., Macri, L., Li, W., Lampeitl, H., Casertano, S., Ferguson, H. C., Filippenko, A. V., Jha, S. W., Chornock, R., Greenhill, L., Mutchler, M., Ganeshalingham, M., and Hicken, M., “Cepheid Calibrations of Modern Type Ia Supernovae: Implications for the Hubble Constant,” *Ap.J. Supp.*, **193**, 109-141.



### Articles in Refereed Journals (131)

- 2009 Lonsdale, C. J., Cappallo, R. J., Morales, M. F., Briggs, F. H., Benkevitch, L., Bowman, J. D., Bunton, J. D., Burns, S., Corey, B. E., deSouza, L., Doeleman, S. S., Derome, M., Deshpande, A., Gopalakrishna, M. R., Greenhill, L. J., Herne, D., Hewitt, J. N., Kamini, P. A., Kasper, J. C., Kincaid, B. B., Kocz, J., Kowald, E., Kratzenberg, E., Kumar, D., Lynch, M. J., Madhavi, S., Matejek, M., Mitchell, D., Morgan, E., Oberoi, D., Ord, S., Pathikulangara, J., Prabu, T., Rogers, A. E., Roshi, A., Salah, J. E., Sault, R. J., Shankar, N. U., Srivani, K. S., Stevens, J., Tingay, S., Vaccarella, A., Waterson, M., Wayth, R. B., Webster, R. L., Whitney, A. R., Williams, A., and Williams, C., "The Murchison Widefield Array: Design Overview," *Proc. IEEE.*, **97**(8), 1497-1506.
- 2009 Wayth, R. B., Greenhill, L. J., and Briggs, F. H., "A GPU-Based Real-Time Software Correlation System for the Murchison Widefield Array Prototype," *PASP*, **121**, 857-865.
- 2009 Goddi, C., Greenhill, L. J., Chandler, C. J., Humphreys, E. M. L., Matthews, L. D., and Gray, M. D., "Maser Emission from SiO Isotopologues Traces the Innermost 100 AU Around Radio Source I in Orion Becklin–Neugebauer/Kleinmann-Low," *Ap.J.*, **698**, 1165-1173.
- 2009 Greenhill, L. J., Kondratko, P. T., Moran, J. M., and Tilak, A., "Discovery of Candidate H<sub>2</sub>O Disk Masers in AGN and Estimations of Centripetal Accelerations," *Ap.J.*, **707**, 787-799.
- 2010 Matthews, L. D., Greenhill, L. J., Goddi, C., Chandler, C. J., Humphreys, E. M. L., and Kunz, W., "A Feature Movie of SiO Emission 20-100 AU from the Massive Young Stellar Object Orion Source I," *Ap.J.*, **708**, 80-92.
- 2010 Sekiguchi, T., Ichikawa, K., Takahashi, T., and Greenhill, L. J., "Neutrino Mass from Cosmology: Impact of High-Accuracy Measurement of the Hubble Constant," *JCAP*, **3**, 15.
- 2010 Ord, S.M., Mitchell, D.A., Wayth, R.B., Greenhill, L.J., Bernardi, G., Gleadow, S., Edgar, R.G., Clark, M.A., Allen, G., Arcus, W., Benkevitch, L., Bowman, J.D., Briggs, F.H., Bunton, J.D., Burns, S., Cappallo, R.J., Coles, W.A., Corey, B.E., Desouza, L., Doeleman, S.S., Derome, M., Deshpande, A., Emrich, D., Goeke, R., Gopalakrishna, M.R., Herne, D., Hewitt, J.N., Kamini, P.A., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Kocz, J., Kowald, E., Kratzenberg, E., Kumar, D., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Madhavi, S., Matejek, M., Morales, M.F., Morgan, E., Oberoi, D., Pathikulangara, J., Prabu, T., Rogers, A.E.E., Roshi, A., Salah, J.E., Schinkel, A., Udaya Shankar, N., Srivani, K.S., Stevens, J., Tingay, S.J., Vaccarella, A., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C. "Interferometric Imaging with the 32-Element Murchison Wide-Field Array, " *PASP*, **122**, 1353-1366.
- 2010 Edgar, R. G. Clark, M. A., Dale, K., Mitchell, D. A., Ord, S. M., Wayth, R. B., Pfister,

### Articles in Refereed Journals (131)

- H., and Greenhill, L. J., "Enabling a High Throughput Real Time Data Pipeline for a Large Radio Telescope Array with GPUs," *Comp.Phys.Comm.*, **181**, 1707-1714.
- 2011 Goddi, C., Humphreys, E. M. L., Greenhill, L. J., Chandler, C. J., and Matthews, L. D., "A Multi-Epoch Study of the Radio Continuum Emission of Orion Source I: Constraints on the Disk Evolution of a Massive YSO and the Dynamical History of Orion BN/KL," *Ap.J.*, **728**, 15-30.
- 2011 Pindor, B., Wyithe, J. S. B., Mitchell, D. A., Ord, S. M., Wayth, R. B., and Greenhill, L. J., "Subtraction of Bright Point Sources from Synthesis Images of the Epoch of Reionization," *PASA*, **28**, 46-57.
- 2011 Bernardi, G., Mitchell, D. A., Ord, S. M., Greenhill, L. J., Pindor, B., Wayth, R. B., and Wyithe, J. S. B., "Subtraction of Point Sources from Interferometric Radio Images Through an Algebraic Forward Modeling Scheme," *MNRAS*, **413**, 411-422.
- 2011 Goddi, C., Greenhill, L. J., Humphreys, E. M. L., Chandler, C. J., and Matthews, L. D., "Unveiling Sources of Heating in the Vicinity of the Orion BN/KL Hot Core as Traced by Highly Excited Inversion Transitions of Ammonia," *Ap.J. (Lett.)*, **739**, L13-L16.
- 2011 Zhu, G., Zaw, I., Blanton, M. R., Greenhill, L. J., "The Host Galaxies of Circumnuclear Water Masers," *Ap.J.*, **742**, 73-83.
- 2012 Mitchell, D.A., Wayth, R.B., Bernardi, G., Greenhill, L.J., Ord, S.M. "Direction-Dependent Polarized Primary Beams in Wide-Field Synthesis Imaging," *JAI*, 1, id. 1250003.
- 2013 Clark, M. A., LaPlante, P. C., Greenhill, L. J. "Accelerating radio astronomy cross-correlation with graphics processing units," *Int. J. High Perf. Computing App*, 27, 178-192.
- 2013 Bernardi, G., Greenhill, L.J., Mitchell, D.A., Ord, S.M., Hazelton, B.J., Gaensler, B.M., de Oliveira-Costa, A., Morales, M.F., Udaya Shankar, N., Subrahmanyan, R., Wayth, R.B., Lenc, E., Williams, C.L., Arcus, W., Arora, B.S., Barnes, D.G., Bowman, J.D., Briggs, F.H., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A., deSouza, L., Emrich, D., Goeke, R., Herne, D., Hewitt, J.N., Johnston-Hollitt, M., Kaplan, D., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Morgan, E., Oberoi, D., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Srivani, K.S., Stevens, J., Tingay, S.J., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Wyithe, J.S.B. "A 189 MHz, 2400 sq. deg. Polarization Survey with the Murchison Widefield Array 32-element Prototype," *ApJ*, 771, id. 105.
- 2013 Greenhill, L.J., Goddi, C., Chandler, C.J., Matthews, L.D., Humphreys, E.M.L. "Dynamical Evidence for a Magnetocentrifugal Wind from a 20 Msun\$ Binary Young

### Articles in Refereed Journals (131)

- Stellar Object, " ApJ, 770, L32-L37.
- 2013 Humphreys, E.M.L., Reid, M.J., Moran, J.M., Greenhill, L.J., Argon, A.L. "Toward a New Geometric Distance to the Active Galaxy NGC 4258. III. Final Results and the Hubble Constant, " ApJ, 775, id. 13.
- 2014 Kocz, J., Greenhill, L.J., Barsdell, B.R., Bernardi, G., Jameson, A., Clark, M.A., Craig, J., Price, D., Taylor, G.B., Schinzel, F., Werthimer, D. "A Scalable Hybrid FPGA/GPU FX Correlator, " *JAI*, 3, id. 1450002.
- 2015 Bernardi, G., McQuinn, M., Greenhill, L.J. "Foreground Model and Antenna Calibration Errors in the Measurement of the Sky-averaged 21 cm Signal at  $z\sim 20$ ," ApJ, 799, id. 90.
- 2015 Kocz, J., Greenhill, L.J., Barsdell, B.R., Price, D., Bernardi, G., Bourke, S., Clark, M.A., Craig, J., Dexter, M., Dowell, J., Eftekhari, T., Ellingson, S., Hallinan, G., Hartman, J., Jameson, A., MacMahon, D., Taylor, G., Schinzel, F., Werthimer, D. "Digital Signal Processing Using Stream High Performance Computing: A 512-Input Broadband Correlator for Radio Astronomy," *JAI*, 4, id. 1550003.
- 2015 Price, D.C., Barsdell, B.R., Greenhill, L.J. "HDFITS: porting the FITS data model to HDF5," *Astronomy & Computing*, in review.
- 2015 Price, D.C., Clark, M.A., Barsdell, B.R., Babich, R., Greenhill, L.J. "Optimizing performance per watt on GPUs in High Performance Computing: temperature, frequency and voltage effects," *Proc. International Conf. Energy-Aware HPC*, Dresden, August 31-September 1 2015, in review.

### Collaboration Articles in Refereed Journals

- 2011 Oberoi, D., Matthews, L.D., Cairns, I.H., Emrich, D., Lobzin, V., Lonsdale, C.J., Morgan, E.H., Prabu, T., Vedantham, H., Wayth, R.B., Williams, A., Williams, C., White, S.M., Allen, G., Arcus, W., Barnes, D., Benkevitch, L., Bernardi, G., Bowman, J.D., Briggs, F.H., Bunton, J.D., Burns, S., Cappallo, R.C., Clark, M.A., Corey, B.E., Dawson, M., DeBoer, D., De Gans, A., deSouza, L., Derome, M., Edgar, R.G., Elton, T., Goeke, R., Gopalakrishna, M.R., Greenhill, L.J., Hazelton, B., Herne, D., Hewitt, J.N., Kamini, P.A., Kaplan, D.L., Kasper, J.C., Kennedy, R., Kincaid, B.B., Kocz, J., Koeing, R., Kowald, E., Lynch, M.J., Madhavi, S., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Ng, A., Ord, S.M., Pathikulangara, J., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Schinckel, A., Udaya Shankar, N., Srivani, K.S., Stevens, J., Subrahmanyam, R., Thakkar, D., Tingay, S.J., Tuthill, J., Vaccarella, A., Waterson, M., Webster, R.L., Whitney, A.R. "First Spectroscopic Imaging Observations of the Sun at Low Radio Frequencies with the Murchison Widefield Array Prototype, " ApJ, 728, L27-L33.
- 2012 Beardsley, A.P., Hazelton, B.J., Morales, M.F., Capallo, R.J., Goeke, R., Emrich, D.,

### Collaboration Articles in Refereed Journals

- Lonsdale, C.J., Arcus, W., Barnes, D., Bernardi, G., Bowman, J.D., Bunton, J.D., Corey, B.E., Deshpande, A., deSouza, L., Gaensler, B.M., Greenhill, L.J., Herne, D., Hewitt, J.N., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morgan, E., Oberoi, D., Ord, S.M., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Shankar, N.U., Srivani, K.S., Stevens, J., Subrahmanyan, R., Tingay, S.J., Wayth, R.B., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "A new layout optimization technique for interferometric arrays, applied to the Murchison Widefield Array, " *MNRAS*, 425, 1781-1788.
- 2012 Taylor, G.B., Ellingson, S.W., Kassim, N.E., Craig, J., Dowell, J., Wolfe, C.N., Hartman, J., Bernardi, G., Clarke, T., Cohen, A., Dalal, N.P., Erickson, W.C., Hicks, B., Greenhill, L.J., Jacoby, B., Lane, W., Lazio, J., Mitchell, D., Navarro, R., Ord, S.M., Pihlström, Y., Polisensky, E., Ray, P.S., Rickard, L.J., Schinzel, F.K., Schmitt, H., Sigman, E., Soriano, M., Stewart, K.P., Stovall, K., Tremblay, S., Wang, D., Weiler, K.W., White, S., Wood, D.L. "First Light for the First Station of the Long Wavelength Array, " *JAI*, 1, id. 1250004.
- 2012 Williams, C.L., Hewitt, J.N., Levine, A.M., de Oliveira-Costa, A., Bowman, J.D., Briggs, F.H., Gaensler, B.M., Hernquist, L.L., Mitchell, D.A., Morales, M.F., Sethi, S.K., Subrahmanyan, R., Sadler, E.M., Arcus, W., Barnes, D.G., Bernardi, G., Bunton, J.D., Cappallo, R.C., Crosse, B.W., Corey, B.E., Deshpande, A., deSouza, L., Emrich, D., Goeke, R.F., Greenhill, L.J., Hazelton, B.J., Herne, D., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Morgan, E.H., Oberoi, D., Ord, S.M., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Anish Roshi, D., Salah, J.E., Sault, R.J., Udaya Shankar, N., Srivani, K.S., Stevens, J.B., Tingay, S.J., Wayth, R.B., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A.J., Wyithe, J.S.B. "Low-frequency Imaging of Fields at High Galactic Latitude with the Murchison Widefield Array 32 Element Prototype, " *ApJ*, 755, id. 47.
- 2012 Sullivan, I.S., Morales, M.F., Hazelton, B.J., Arcus, W., Barnes, D., Bernardi, G., Briggs, F.H., Bowman, J.D., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A., deSouza, L., Emrich, D., Gaensler, B.M., Goeke, R., Greenhill, L.J., Herne, D., Hewitt, J.N., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morgan, E., Oberoi, D., Ord, S.M., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Udaya Shankar, N., Srivani, K.S., Stevens, J., Subrahmanyan, R., Tingay, S.J., Wayth, R.B., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "Fast Holographic Deconvolution: A New Technique for Precision Radio Interferometry, " *ApJ*, 759, id. 17
- 2013 B. McKinley, F. Briggs, D. L. Kaplan, L. J. Greenhill, G. Bernardi, J. D. Bowman, A. de Oliveira-Costa, S. J. Tingay, B. M. Gaensler, M. Johnston-Hollitt, J. D. Bunton, W. Arcus, D. Barnes, R. C. Cappallo, B. E. Corey, A. Deshpande, L. deSouza, D. Emrich, R. Goeke, B. J. Hazelton, D. Herne, J. N. Hewitt, J. C. Kasper, B. B.

### Collaboration Articles in Refereed Journals

- Kincaid11, R. Koenig, E. Kratzenberg, C. J. Lonsdale, M. J. Lynch, S. R. McWhirter, D. A. Mitchell, M. F. Morales, E. Morgan, D. Oberoi, S. M. Ord, J. Pathikulangara, T. Prabu, R. A. Remillard, A. E. E. Rogers, A. Rosh, J. E. Salah, R. J. Sault, N. Udaya Shankar, K. S. Srivani, J. Stevens, R. Subrahmanyam, R. B. Wayth, M. Waterson, R. L. Webster, A. R. Whitney, A. Williams, C. L. Williams, J. S. B. Wyithe, "Low Frequency Observations of the Moon with the Murchison Widefield Array," *AJ*, 145, id. 23.
- 2013 Tingay, S.J., Goeke, R., Bowman, J.D., Emrich, D., Ord, S.M., Mitchell, D.A., Morales, M.F., Booler, T., Crosse, B., Wayth, R.B., Lonsdale, C.J., Tremblay, S., Pallot, D., Colegate, T., Wicenc, A., Kudryavtseva, N., Arcus, W., Barnes, D., Bernardi, G., Briggs, F., Burns, S., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A., Desouza, L., Gaensler, B.M., Greenhill, L.J., Hall, P.J., Hazelton, B.J., Herne, D., Hewitt, J.N., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lynch, M.J., Mckinley, B., McWhirter, S.R., Morgan, E., Oberoi, D., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Rosh, A., Salah, J.E., Sault, R.J., Udaya-Shankar, N., Schlagenhauser, F., Srivani, K.S., Stevens, J., Subrahmanyam, R., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "The Murchison Widefield Array: The Square Kilometre Array Precursor at Low Radio Frequencies," *PASA*, 30, id. e007.
- 2013 Bowman, J.D., Cairns, I., Kaplan, D.L., Murphy, T., Oberoi, D., Staveley-Smith, L., Arcus, W., Barnes, D.G., Bernardi, G., Briggs, F.H., Brown, S., Bunton, J.D., Burgasser, A.J., Cappallo, R.J., Chatterjee, S., Corey, B.E., Coster, A., Deshpande, A., deSouza, L., Emrich, D., Erickson, P., Goeke, R.F., Gaensler, B.M., Greenhill, L.J., Harvey-Smith, L., Hazelton, B.J., Herne, D., Hewitt, J.N., Johnston-Hollitt, M., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., Matthews, L.D., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E.H., Ord, S.M., Pathikulangara, J., Prabu, T., Remillard, R.A., Robshaw, T., Rogers, A.E.E., Rosh, A.A., Salah, J.E., Sault, R.J., Shankar, N.U., Srivani, K.S., Stevens, J.B., Subrahmanyam, R., Tingay, S.J., Wayth, R.B., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A.J., Williams, C.L., Wyithe, J.S.B. "Science with the Murchison Widefield Array," *PASA*, 30, id. e031.
- 2013 Beardsley, A.P., Hazelton, B.J., Morales, M.F., Arcus, W., Barnes, D., Bernardi, G., Bowman, J.D., Briggs, F.H., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A., deSouza, L., Emrich, D., Gaensler, B.M., Goeke, R., Greenhill, L.J., Herne, D., Hewitt, J.N., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morgan, E., Oberoi, D., Ord, S.M., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Rosh, A., Salah, J.E., Sault, R.J., Udaya, S.N., Srivani, K.S., Stevens, J., Subrahmanyam, R., Tingay, S.J., Wayth, R.B., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "The EoR sensitivity of the Murchison Widefield Array," *MNRAS*, 429, L5-L9.
- 2013 Thyagarajan, N., Udaya Shankar, N., Subrahmanyam, R., Arcus, W., Bernardi, G.,

### Collaboration Articles in Refereed Journals

- Bowman, J.D., Briggs, F., Bunton, J.D., Cappallo, R.J., Corey, B.E., deSouza, L., Emrich, D., Gaensler, B.M., Goeke, R.F., Greenhill, L.J., Hazelton, B.J., Herne, D., Hewitt, J.N., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E.H., Oberoi, D., Ord, S.M., Pathikulangara, J., Remillard, R.A., Rogers, A.E.E., Anish Roshi, D., Salah, J.E., Sault, R.J., Srivani, K.S., Stevens, J.B., Thiagaraj, P., Tingay, S.J., Wayth, R.B., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A.J., Williams, C.L., Wyithe, J.S.B. "A Study of Fundamental Limitations to Statistical Detection of Redshifted H I from the Epoch of Reionization, " *ApJ*, 776, id. 6.
- 2013 McKinley, B., Briggs, F., Gaensler, B. M., Feain, I. J., Bernardi, G., Wayth, R. B., Johnston-Hollitt, M., Offringa, A. R., Arcus, W., Barnes, D. G., Bowman, J. D., Bunton, J. D., Cappallo, R. J., Corey, B. E., Deshpande, A. A., deSouza, L., Emrich, D., Goeke, R., Greenhill, L. J., Hazelton, B. J., Herne, D., Hewitt, J. N., Kaplan, D. L., Kasper, J. C., Kincaid, B. B., Koenig, R., Kratzenberg, E., Lonsdale, C. J., Lynch, M. J., McWhirter, S. R., Mitchell, D. A., Morales, M. F., Morgan, E., Oberoi, D., Ord, S. M., Pathikulangara, J., Prabu, T., Remillard, R. A., Rogers, A. E. E., Roshi, D. A., Salah, J. E., Sault, R. J., Shankar, N. Udaya, Srivani, K. S., Stevens, J., Subrahmanyan, R., Tingay, S. J., Waterson, M., Webster, R. L., Whitney, A. R., Williams, A., Williams, C. L., Wyithe, J. S. B. "The giant lobes of Centaurus A observed at 118 MHz with the Murchison Widefield Array," *MNRAS*, 436, 1286-1301.
- 2013 McKinley, B., Briggs, F., Kaplan, D.L., Greenhill, L.J., Bernardi, G., Bowman, J.D., de Oliveira-Costa, A., Tingay, S.J., Gaensler, B.M., Oberoi, D., Johnston-Hollitt, M., Arcus, W., Barnes, D., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A., deSouza, L., Emrich, D., Goeke, R., Hazelton, B.J., Herne, D., Hewitt, J.N., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Ord, S.M., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Udaya Shankar, N., Srivani, K.S., Stevens, J., Subrahmanyan, R., Wayth, R.B., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "Low-frequency Observations of the Moon with the Murchison Widefield Array, " *AJ*, 145, id. 23.
- 2013 Tingay, S.J., Kaplan, D.L., McKinley, B., Briggs, F., Wayth, R.B., Hurley-Walker, N., Kennewell, J., Smith, C., Zhang, K., Arcus, W., Bhat, N.D.R., Emrich, D., Herne, D., Kudryavtseva, N., Lynch, M., Ord, S.M., Waterson, M., Barnes, D.G., Bell, M., Gaensler, B.M., Lenc, E., Bernardi, G., Greenhill, L.J., Kasper, J.C., Bowman, J.D., Jacobs, D., Bunton, J.D., deSouza, L., Koenig, R., Pathikulangara, J., Stevens, J., Cappallo, R.J., Corey, B.E., Kincaid, B.B., Kratzenberg, E., Lonsdale, C.J., McWhirter, S.R., Rogers, A.E.E., Salah, J.E., Whitney, A.R., Deshpande, A., Prabu, T., Udaya Shankar, N., Srivani, K.S., Subrahmanyan, R., Ewall-Wice, A., Feng, L., Goeke, R., Morgan, E., Remillard, R.A., Williams, C.L., Hazelton, B.J., Morales, M.F., Johnston-Hollitt, M., Mitchell, D.A., Procopio, P., Riding, J., Webster, R.L., Wyithe, J.S.B., Oberoi, D., Roshi, A., Sault, R.J., Williams, A. "On the Detection and Tracking of Space Debris Using the Murchison Widefield Array. I. Simulations and

### Collaboration Articles in Refereed Journals

Test Observations Demonstrate Feasibility, " AJ, 146, id. 103.

- 2013 Tingay, S.J., Oberoi, D., Cairns, I., Donea, A., Duffin, R., Arcus, W., Bernardi, G., Bowman, J.D., Briggs, F., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A., deSouza, L., Emrich, D., Gaensler, B.M., R. G., Greenhill, L.J., Hazelton, B.J., Herne, D., Hewitt, J.N., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kennewell, J.A., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Ord, S.M., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Udaya-Shankar, N., Srivani, K.S., Stevens, J., Subrahmanyam, R., Waterson, M., Wayth, R.B., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "The Murchison Widefield Array: solar science with the low frequency SKA Precursor, " *JPhCS*, 440, id. 012033.
- 2014 Bell, M.E., Murphy, T., Kaplan, D.L., Hancock, P., Gaensler, B.M., Banyer, J., Bannister, K., Trott, C., Hurley-Walker, N., Wayth, R.B., Macquart, J.-P., Arcus, W., Barnes, D., Bernardi, G., Bowman, J.D., Briggs, F., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A., deSouza, L., Emrich, D., Goeke, R., Greenhill, L.J., Hazelton, B.J., Herne, D., Hewitt, J.N., Johnston-Hollitt, M., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Oberoi, D., Ord, S.M., Pathikulangara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Udaya Shankar, N., Srivani, K.S., Stevens, J., Subrahmanyam, R., Tingay, S.J., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "A survey for transients and variables with the Murchison Widefield Array 32-tile prototype at 154 MHz, " *MNRAS*, 438, 352-367.
- 2014 Hurley-Walker, N., Morgan, J., Wayth, R.B., Hancock, P.J., Bell, M.E., Bernardi, G., Bhat, R., Briggs, F., Deshpande, A.A., Ewall-Wice, A., Feng, L., Hazelton, B.J., Hindson, L., Jacobs, D.C., Kaplan, D.L., Kudryavtseva, N., Lenc, E., McKinley, B., Mitchell, D., Pindor, B., Procopio, P., Oberoi, D., Offringa, A., Ord, S., Riding, J., Bowman, J.D., Cappallo, R., Corey, B., Emrich, D., Gaensler, B.M., Goeke, R., Greenhill, L., Hewitt, J., Johnston-Hollitt, M., Kasper, J., Kratzenberg, E., Lonsdale, C., Lynch, M., McWhirter, R., Morales, M.F., Morgan, E., Prabu, T., Rogers, A., Roshi, A., Shankar, U., Srivani, K., Subrahmanyam, R., Tingay, S., Waterson, M., Webster, R., Whitney, A., Williams, A., Williams, C. "The Murchison Widefield Array Commissioning Survey: A Low-Frequency Catalogue of 14 110 Compact Radio Sources over 6 100 Square Degrees, " *PASA*, 31, id. e045.
- 2014 Offringa, A.R., McKinley, B., Hurley-Walker, N., Briggs, F.H., Wayth, R.B., Kaplan, D.L., Bell, M.E., Feng, L., Neben, A.R., Hughes, J.D., Rhee, J., Murphy, T., Bhat, N.D.R., Bernardi, G., Bowman, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A.A., Emrich, D., Ewall-Wice, A., Gaensler, B.M., Goeke, R., Greenhill, L.J., Hazelton, B.J., Hindson, L., Johnston-Hollitt, M., Jacobs, D.C., Kasper, J.C., Kratzenberg, E., Lenc, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Kudryavtseva, N., Oberoi, D., Ord, S.M., Pindor, B., Procopio, P., Prabu, T., Riding, J., Roshi, D.A., Shankar, N.U., Srivani, K.S., Subrahmanyam, R.,

### Collaboration Articles in Refereed Journals

- Tingay, S.J., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L. "WSCLEAN: an implementation of a fast, generic wide-field imager for radio astronomy, " *MNRAS*, 444, 606-619.
- 2014 Hindson, L., Johnston-Hollitt, M., Hurley-Walker, N., Buckley, K., Morgan, J., Carretti, E., Dwarakanath, K.S., Bell, M., Bernardi, G., Bhat, N.D.R., Bowman, J.D., Briggs, F., Cappallo, R.J., Corey, B.E., Deshpande, A.A., Emrich, D., Ewall-Wice, A., Feng, L., Gaensler, B.M., Goeke, R., Greenhill, L.J., Hazelton, B.J., Jacobs, D., Kaplan, D.L., Kasper, J.C., Kratzenberg, E., Kudryavtseva, N., Lenc, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., McKinley, B., Mitchell, D.A., Morales, M.F., Morgan, E., Oberoi, D., Ord, S.M., Pindor, B., Prabu, T., Procopio, P., Offringa, A.R., Riding, J., Rogers, A.E.E., Roshi, A., Shankar, N.U., Srivani, K.S., Subrahmanyan, R., Tingay, S.J., Waterson, M., Wayth, R.B., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L. "The First Murchison Widefield Array low-frequency radio observations of cluster scale non-thermal emission: the case of Abell 3667, " *MNRAS*, 445, 330-346.
- 2014 Bhat, N.D.R., Ord, S.M., Tremblay, S.E., Tingay, S.J., Deshpande, A.A., van Straten, W., Oronsaye, S., Bernardi, G., Bowman, J.D., Briggs, F., Cappallo, R.J., Corey, B.E., Emrich, D., Goeke, R., Greenhill, L.J., Hazelton, B.J., Hewitt, J.N., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Oberoi, D., Prabu, T., Rogers, A.E.E., Roshi, D.A., Udaya Shankar, N., Srivani, K.S., Subrahmanyan, R., Waterson, M., Wayth, R.B., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L. "The Low-frequency Characteristics of PSR J0437-4715 Observed with the Murchison Wide-field Array, " *ApJ*, 791, L32-L37.
- 2014 Paul, S., Sethi, S.K., Subrahmanyan, R., Udaya Shankar, N., Dwarakanath, K.S., Deshpande, A.A., Bernardi, G., Bowman, J.D., Briggs, F., Cappallo, R.J., Corey, B.E., Emrich, D., Gaensler, B.M., Goeke, R.F., Greenhill, L.J., Hazelton, B.J., Hewitt, J.N., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E.H., Oberoi, D., Ord, S.M., Prabu, T., Rogers, A.E.E., Roshi, A.A., Srivani, K.S., Tingay, S.J., Wayth, R.B., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A.J., Williams, C.L. "Study of Redshifted H I from the Epoch of Reionization with Drift Scan, " *ApJ*, 793, id. 28.
- 2015 Murphy, T., Bell, M.E., Kaplan, D.L., Gaensler, B.M., Offringa, A.R., Lenc, E., Hurley-Walker, N., Bernardi, G., Bowman, J.D., Briggs, F., Cappallo, R.J., Corey, B.E., Deshpande, A.A., Emrich, D., Goeke, R., Greenhill, L.J., Hazelton, B.J., Hewitt, J.N., Johnston-Hollitt, M., Kasper, J.C., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Oberoi, D., Ord, S.M., Prabu, T., Rogers, A.E.E., Roshi, D.A., Shankar, N.U., Srivani, K.S., Subrahmanyan, R., Tingay, S.J., Waterson, M., Wayth, R.B., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L. "Limits on low-frequency radio emission from southern exoplanets with the Murchison Widefield Array," *MNRAS*, 446, 2560-2565.



### Collaboration Articles in Refereed Journals

- 2015 Tingay, S.J., Macquart, J.-P., Collier, J.D., Rees, G., Callingham, J.R., Stevens, J., Carretti, E., Wayth, R.B., Wong, G.F., Trott, C.M., McKinley, B., Bernardi, G., Bowman, J.D., Briggs, F., Cappallo, R.J., Corey, B.E., Deshpande, A.A., Emrich, D., Gaensler, B.M., Goeke, R., Greenhill, L.J., Hazelton, B.J., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Oberoi, D., Ord, S.M., Prabu, T., Rogers, A.E.E., Roshi, A., Udaya Shankar, N., Srivani, K.S., Subrahmanyan, R., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L. "The Spectral Variability of the GHz-Peaked Spectrum Radio Source PKS 1718-649 and a Comparison of Absorption Models," *AJ*, 149, id.74.
- 2015 Prabu, T., Srivani, K.S., Roshi, D.A., Kamini, P.A., Madhavi, S., Emrich, D., Crosse, B., Williams, A.J., Waterson, M., Deshpande, A.A., Shankar, N.U., Subrahmanyan, R., Briggs, F.H., Goeke, R.F., Tingay, S.J., Johnston-Hollitt, M., R, G.M., Morgan, E.H., Pathikulangara, J., Bunton, J.D., Hampson, G., Williams, C., Ord, S.M., Wayth, R.B., Kumar, D., Morales, M.F., deSouza, L., Kratzenberg, E., Pallot, D., McWhirter, R., Hazelton, B.J., Arcus, W., Barnes, D.G., Bernardi, G., Booler, T., Bowman, J.D., Cappallo, R.J., Corey, B.E., Greenhill, L.J., Herne, D., Hewitt, J.N., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koenig, R., Lonsdale, C.J., Lynch, M.J., Mitchell, D.A., Oberoi, D., Remillard, R.A., Rogers, A.E., Salah, J.E., Sault, R.J., Stevens, J.B., Tremblay, S., Webster, R.L., Whitney, A.R., Wyithe, S.B. "A digital-receiver for the Murchison Widefield Array," *ExA*, in press.
- 2015 McKinley, B., Yang, R., Lopez-Caniego, M., Briggs, F., Hurley-Walker, N., Wayth, R.B., Offringa, A.R., Crocker, R., Bernardi, G., Procopio, P., Gaensler, B.M., Tingay, S.J., Johnston-Hollitt, M., McDonald, M., Bell, M., Bhat, N.D.R., Bowman, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A.A., Emrich, D., Ewall-Wice, A., Feng, L., Goeke, R., Greenhill, L.J., Hazelton, B.J., Hewitt, J.N., Hindson, L., Jacobs, D., Kaplan, D.L., Kasper, J.C., Kratzenberg, E., Kudryavtseva, N., Lenc, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Oberoi, D., Ord, S.M., Pindor, B., Prabu, T., Riding, J., Rogers, A.E.E., Roshi, D.A., Udaya Shankar, N., Srivani, K.S., Subrahmanyan, R., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L. "Modelling of the spectral energy distribution of Fornax A: leptonic and hadronic production of high-energy emission from the radio lobes," *MNRAS*, 446, 3478-3491.
- 2015 Tremblay, S.E., Ord, S.M., Bhat, N.D.R., Tingay, S.J., Crosse, B., Pallot, D., Oronsaye, S.I., Bernardi, G., Bowman, J.D., Briggs, F., Cappallo, R.J., Corey, B.E., Deshpande, A.A., Emrich, D., Goeke, R., Greenhill, L.J., Hazelton, B.J., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Oberoi, D., Prabu, T., Rogers, A.E.E., Roshi, A., Udaya Shankar, N., Srivani, K.S., Subrahmanyan, R., Waterson, M., Wayth, R.B., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L. "The High Time and Frequency Resolution Capabilities of the Murchison Widefield Array," *PASA*, 32, id. e005.
- 2015 Hurley-Walker, N., Johnston-Hollitt, M., Ekers, R., Hunstead, R., Sadler, E.M.,

### Collaboration Articles in Refereed Journals

- Hindson, L., Hancock, P., Bernardi, G., Bowman, J.D., Briggs, F., Cappallo, R., Corey, B., Deshpande, A.A., Emrich, D., Gaensler, B.M., Goeke, R., Greenhill, L., Hazelton, B.J., Hewitt, J., Kaplan, D.L., Kasper, J., Kratzenberg, E., Lonsdale, C., Lynch, M., Mitchell, D., McWhirter, R., Morales, M., Morgan, E., Oberoi, D., Offringa, A., Ord, S., Prabu, T., Rogers, A., Roshi, A., Shankar, U., Srivani, K., Subrahmanyan, R., Tingay, S., Waterson, M., Wayth, R.B., Webster, R., Whitney, A., Williams, A., Williams, C. "Serendipitous discovery of a dying Giant Radio Galaxy associated with NGC 1534, using the Murchison Widefield Array, " *MNRAS*, 447, 2468-2478.
- 2015 Ord, S.M., Crosse, B., Emrich, D., Pallot, D., Wayth, R.B., Clark, M.A., Tremblay, S.E., Arcus, W., Barnes, D., Bell, M., Bernardi, G., Bhat, N.D.R., Bowman, J.D., Briggs, F., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A.A., deSouza, L., Ewell-Wice, A., Feng, L., Goeke, R., Greenhill, L.J., Hazelton, B.J., Herne, D., Hewitt, J.N., Hindson, L., Hurley-Walker, N., Jacobs, D., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koenig, R., Kratzenberg, E., Kudryavtseva, N., Lenc, E., Lonsdale, C.J., Lynch, M.J., McKinley, B., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Oberoi, D., Offringa, A., Pathikulangara, J., Pindor, B., Prabu, T., Procopio, P., Remillard, R.A., Riding, J., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Udaya Shankar, N., Srivani, K.S., Stevens, J., Subrahmanyan, R., Tingay, S.J., Waterson, M., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "The Murchison Widefield Array Correlator," *PASA*, 32, id. e006.
- 2015 Offringa, A.R., Wayth, R.B., Hurley-Walker, N., Kaplan, D.L., Barry, N., Beardsley, A.P., Bell, M.E., Bernardi, G., Bowman, J.D., Briggs, F., Callingham, J.R., Cappallo, R.J., Carroll, P., Deshpande, A.A., Dillon, J.S., Dwarakanath, K.S., Ewall-Wice, A., Feng, L., For, B.-Q., Gaensler, B.M., Greenhill, L.J., Hancock, P., Hazelton, B.J., Hewitt, J.N., Hindson, L., Jacobs, D.C., Johnston-Hollitt, M., Kapi{\n}ska, A.D., Kim, H.-S., Kittiwisit, P., Lenc, E., Line, J., Loeb, A., Lonsdale, C.J., McKinley, B., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Morgan, J., Neben, A.R., Oberoi, D., Ord, S.M., Paul, S., Pindor, B., Pober, J.C., Prabu, T., Procopio, P., Riding, J., Udaya Shankar, N., Sethi, S., Srivani, K.S., Staveley-Smith, L., Subrahmanyan, R., Sullivan, I.S., Tegmark, M., Thyagarajan, N., Tingay, S.J., Trott, C.M., Webster, R.L., Williams, A., Williams, C.L., Wu, C., Wyithe, J.S., Zheng, Q. "The Low-Frequency Environment of the Murchison Widefield Array: Radio-Frequency Interference Analysis and Mitigation," *PASA*, 32, id. e008.

## Published White Papers

- 2009 Furlanetto, S. R., Lidz, A., Loeb, A., McQuinn, M., Pritchard, J. R., Shapiro, P. R., Alvarez, M. A., Backer, D. C., Bowman, J. D., Burns, J. O., Carilli, C. L., Cen, R., Cooray, A., Gnedin, N., Greenhill, L. J., Haiman, Z., Hewitt, J. N., Hirata, C. M., Lazio, J., Mesinger, A., Madau, P., Morales, M. F., Oh, S. P., Peterson, J. B., Pihlström, Y. M., Tegmark, M., Trac, H., Zahn, O., and Zaldarriaga, M., “Cosmology from the Highly Redshifted 21-cm Line,” *Astro2010: The Astronomy and Astrophysics Decadal Survey, Science White Papers*, **82**.
- 2009 Furlanetto, S. R., Lidz, A., Loeb, A., McQuinn, M., Pritchard, J. R., Alvarez, M. A., Backer, D. C., Bowman, J. D., Burns, J. O., Carilli, C. L., Cen, R., Cooray, A., Gnedin, N., Greenhill, L. J., Haiman, Z., Hewitt, J. N., Hirata, C. M., Lazio, J., Mesinger, A., Madau, P., Morales, M. F., Oh, S. P., Peterson, J. B., Pihlström, Y. M., Shapiro, P. R., Tegmark, M., Trac, H., Zahn, O., and Zaldarriaga, M., “Astrophysics from the Highly Redshifted 21-cm Line,” *Astro2010: The Astronomy and Astrophysics Decadal Survey, Science White Papers*, **83**.
- 2009 Greenhill, L., “Estimation of the Hubble Constant and Constraint on Descriptions of Dark Energy,” *Astro2010: The Astronomy and Astrophysics Decadal Survey, Science White Papers*, **103**.
- 2009 Marsher, A., Jorstad, S., Murphy, D., Meier, D., Preston, R., Unwin, S., Kellermann, K., Wrobel, J., Romney, J., Homan, D., Lister, M., Piner, G., Greenhill, L., Reid, M., Taylor, G., Weshrle, A., Roberts, D., Readhead, A., Böttcher, M., Georganopoulos, M., Bloom, S., Johnston, K., Cheung, C. C., Krichbaum, T., Tsuboi, M., Inoue, M., and Kamenno, S., “Exploring the Most Compact Regions of Relativistic Jets with the Ultra-High Angular Resolution of Space VLBI,” *Astro2010: The Astronomy and Astrophysics Decadal Survey, Science White Papers*, **193**.
- 2009 Parsons, A., Werthimer, D., Backer, D., Bastian, T., Bower, G., Brisken, W., Chen, H., Deller, A., Filiba, T., Gary, D., Greenhill, L., Hawkins, D., Jones, G., Langston, G., Lasio, J., Van Leeuwen, J., Mitchell, D., Manley, J., Siemion, A., So, H. K.-H., Whitney, A., Woody, D., Wright, M., and Zarb-Adami, K., “Digital Instrumentation for the Radio Astronomy Community,” *Astro2010: The Astronomy and Astrophysics Decadal Survey, Technology Development Papers*, **21**.
- 2009 Backer, D. C., Aguirre, J., Bowman, J. D., Bradley, R., Briggs, F., Carilli, C. L., Furlanetto, S. R., Greenhill, L. J., Hewitt, J. N., Lonsdale, C. J., Morales, M. F., Parsons, A., Tingay, S., and Whitney, A., “HERA – Hydrogen Epoch Reionization Arrays,” *Astro2010: The Astronomy and Astrophysics Decadal Survey, Program Panel Papers*.
- 2012 Suyu, S.H., Treu, T., Blandford, R.D., Freedman, W.L., Hilbert, S., Blake, C., Braatz, J., Courbin, F., Dunkley, J., Greenhill, L., Humphreys, E., Jha, S., Kirshner, R., Lo,

### Published White Papers

K.Y., Macri, L., Madore, B.F., Marshall, P.J., Meylan, G., Mould, J., Reid, B., Reid, M., Riess, A., Schlegel, D., Scowcroft, V., Verde, L. "The Hubble constant and new discoveries in cosmology, " arXiv:1202.4459

### Articles in Conference Proceedings (63)

- 1987 Greenhill, L. J., Moran, J. M., Reid, M. J., Predmore, C. R., McIntosh, G. C., and Rogers, A. E. E., "VLBI Mapping of 43 GHz SiO Emission Associated with IRC2 in Orion-KL," IAU Colloquium 129, *The Impact of VLBI on Astrophysics and Geophysics*, eds. M. J. Reid and J. M. Moran (Boston: Kluwer), 1988, 253.
- 1987 McIntosh, G. C., Predmore, C. R., Moran, J. M., Greenhill, L. J., Reid, M. J., Rogers, A. E. E., and Barvanis, R. E., "SiO Maser Observations - VLBI and Polarimetry," IAU Colloquium 129, *The Impact of VLBI on Astrophysics and Geophysics*, eds. M. J. Reid and J. M. Moran (Boston: Kluwer), 1988, 259.
- 1991 Greenhill, L. J., Bester, M., Danchi, W. C., Degiacomi, C. G., and Townes, C. H., "New Technical Developments at the Infrared Spatial Interferometer," *High Resolution Imaging by Interferometry II*, ed. F. Merkle (Garching: ESO), 1992, 721.
- 1991 Bester, M., Danchi, W. C., Degiacomi, C. G., Greenhill, L. J., and Townes, C. H., "Analysis of Atmospheric Fluctuations and their Implications for High Resolution Astronomy," *High Resolution Imaging by Interferometry II*, ed. F. Merkle (Garching: ESO), 1992, 1017.
- 1991 Danchi, W. C., Degiacomi, C. G., Bester, M., Greenhill, L. J., and Gezari, D. Y., "Short-Exposure 'Speckle' Images of Dust Shells Around Late-Type Stars at 11  $\mu\text{m}$ ," *High Resolution Imaging by Interferometry II*, ed. F. Merkle (Garching: ESO), 1992, 21.
- 1991 Degiacomi, C. G., Bester, M., Danchi, W. C., Greenhill, L. J., and Townes, C. H., "Observations of Circumstellar Dust Shells with a Long Baseline Interferometer at 11  $\mu\text{m}$ ," *High Resolution Imaging by Interferometry II*, ed. F. Merkle (Garching: ESO), 1992, 681.
- 1991 Moran, J. M., Greenhill, L. J., and Reid, M. J., "Galactic and Extragalactic Water Vapor Masers," *Frontiers of VLBI*, eds. H. Hirabayashi, M. Inoue, and H. Kobayashi (Tokyo: Universal Academy Press), 1991, 215.
- 1992 Greenhill, L. J., "Extragalactic H<sub>2</sub>O Masers," *Astrophysical Masers, Lecture Notes in Physics, Vol. 412*, eds. A. W. Clegg and G. E. Nedoluha (Berlin: Springer), 1993, 87.
- 1992 Argon, A. L., Reid, M. J., Moran, J. M., Menten, K. M., Greenhill, L. J., Gwinn, C., Hirabayashi, H., and Inoue, M., "VLBI Observations of the Water Vapor Megamaser in IC 10," *Astrophysical Masers, Lecture Notes in Physics, Vol. 412*, eds. A. W. Clegg and G. E. Nedoluha (Berlin: Springer), 1993, 83.

### Articles in Conference Proceedings (63)

- 1992 Bester, M., Degiacomi, C. G., Danchi, W. C., Greenhill, L. J., and Townes, C. H., "Automation of Interferometric Observations", *Robotic Telescopes for the 1990s*, ASP Conference Series, ed. A. V. Filippenko, 1992, **34**, 213.
- 1993 Danchi, W. C., Greenhill, L. J., Bester, M., Degiacomi, C. G., and Townes, C. H., "Long Baseline Interferometric Observations of Circumstellar Dust Shells at 11 Microns," IAU Colloquium 158, *Very High Resolution Imaging*, eds. J. G. Robertson and W. J. Tango (Dordrecht: Kluwer), 1993, 383.
- 1993 Bester, M., Degiacomi, C. G., Danchi, W. C., Greenhill, L. J., and Townes, C. H., Reisinger, A., and Weaver, J., "Latest Technical Developments at the Infrared Spatial Interferometer," IAU Colloquium 158, *Very High Resolution Imaging*, eds. J. G. Robertson and W. J. Tango (Dordrecht: Kluwer), 1993, 257.
- 1993 Townes, C. H., Bester, M., Danchi, W. C., Degiacomi, C. G., and Greenhill, L. J., "Heterodyne Interferometry in the Infrared," IAU Colloquium 158, *Very High Resolution Imaging*, eds. J. G. Robertson and W. J. Tango (Dordrecht: Kluwer), 1993, 19.
- 1994 Greenhill, L. J., Moran, J. M., Backer, D. C., Bester, M., and Danchi, W. C., "Circumstellar Envelope of VX Sgr Resolved with Long Baseline Interferometry at Millimeter and Mid-infrared Wavelengths," *Amplitude and Intensity Interferometry, Proc. SPIE Vol. 2200*, ed. J. B. Breckinridge (Bellingham: SPIE), 1994, 304.
- 1994 Greenhill, L. J., Jiang, D. R., Moran, J. M., Reid, M. J., Lo, K.-Y., and Claussen, M. J., Henkel, C., Becker, R., Wilson, T. L., and Wouterloot, J. G. A., "A Supermassive Object in the Nucleus of NGC 4258?," *Highlights of Astronomy vol. 10*, ed. I. Appenzeller (Dordrecht: Kluwer), 531.
- 1994 Greenhill, L. J., Colomer, F., Moran, J. M., Backer, D. C., Danchi, W. C., and Bester, M., "The SiO Masers and Dust Shell of VX Sgr," in *Circumstellar Matter 1994*, eds. G. D. Watt and P. M. Williams (Dordrecht: Kluwer), 469 (1995), reprinted in *Astrophys. and Space Sci.*, **224**, 469.
- 1994 Danchi, W. C., Bester, M., Greenhill, L. J., Degiacomi, C. G., Geis, N., Hale, D., Lopez, B., and Townes, C. H., "Inner Radii of Dust Shells and Stellar Diameters Obtained by an Infrared Stellar Interferometer at 11 Micron Wavelength," in *Circumstellar Matter 1994*, eds. G. D. Watt and P. M. Williams (Dordrecht: Kluwer), 447 (1995), reprinted in *Astrophys. and Space Sci.*, **224**, 447.
- 1994 Danchi, W. C., Bester, M., Greenhill, L. J., Degiacomi, C. G., and Townes, C. H., "Analysis of Visibility Data from the U.C. Berkeley Infrared Spatial Interferometer - Radiative Transfer Modeling and Results for Fifteen Stars," *Amplitude and Intensity Interferometry, Proc. SPIE Vol. 2200*, eds. J. B. Breckinridge, 286.
- 1995 Moran, J. M., Greenhill, L. J., Herrnstein, J. R., Diamond, P. J., Miyoshi, M., Nakai, N., and Inoue, M., "Probing Active Galactic Nuclei with H<sub>2</sub>O Megamasers," Proc.

### Articles in Conference Proceedings (63)

- Nat. Acad. Sci. USA, **92**, 11427.
- 1996 Moran, J. M., Greenhill, L. J., Herrnstein, J. R., Diamond, P. J., Miyoshi, M., Nakai, N., and Inoue, M., "Probing AGN with Water Masers," in *Extragalactic Radio Sources*, Proceedings of IAU Symposium 175, eds. R. Ekers, C. Fanti, and L. Padrielli (Dordrecht:Kluwer), 211.
- 1996 Greenhill, L. J., Moran, J. M., Herrnstein, J. R., Diamond, P. J., Miyoshi, M., Nakai, N., and Inoue, M., "Dynamical Evidence for a Supermassive Blackhole in NGC 4258," in *The Physics of LINERS in View of Recent Observations*, eds. M. Eracleous, A. Koratkar, C. Leitherer, and L. Ho, ASP Conference Series, **103**, 140. (*Invited*)
- 1996 Herrnstein, J. R., Moran, J. M., Greenhill, L. J., Diamond, P. J., Miyoshi, M., Nakai, N., and Inoue, M., "The Warp in the Sub-parsec Molecular Disk in NGC 4258," *The Physics of LINERS in View of Recent Observations*, eds. M. Eracleous, A. Koratkar, C. Leitherer, and L. Ho, ASP Conference Series, **103**, 193.
- 1997 Greenhill, L. J., "Masers in Active Galactic Nuclei," in *Emission Lines in Active Galaxies: New Methods and Techniques*, Proceedings of IAU Colloquium 159, eds. B. M. Peterson, F.-Z. Cheng, and A. S. Wilson, ASP Conference Series, **113**, 394. (*Invited*)
- 1997 Greenhill, L. J., and Gwinn, C. R., "VLBI Imaging of Water Maser Emission from a Nuclear Disk in NGC 1068," *Astrophys. and Space Sci.*, **248**, 261.
- 1998 Greenhill, L. J., "Water in NGC 1068," in *Radio Emission from Galactic and Extragalactic Compact Sources*, Proceedings of IAU Colloquium 164, eds. J. A. Zensus, G. B. Taylor, and J. M. Wrobel, ASP Conference Series, **144**, 221.
- 1998 Argon, A. L., Greenhill, L. J., Moran, J. M., Reid, M. J., and Menten, K. M., "Proper Motions and the Distance to a Water Vapor Maser in the Galaxy M 33," in *Radio Emission from Galactic and Extragalactic Compact Sources*, Proceedings of IAU Colloquium 164, eds. J. A. Zensus, G. B. Taylor, and J. M. Wrobel, ASP Conference Series, **144**, 235.
- 1998 Trotter, A. S., Moran, J. M., and Greenhill, L. J., "Water Maser Emission and the Parsec-Scale Jet in NGC 3079," in *Radio Emission from Galactic and Extragalactic Compact Sources*, Proceedings of IAU Colloquium 164, eds. J. A. Zensus, G. B. Taylor, and J. M. Wrobel, ASP Conference Series, **144**, 239.
- 1998 Doleman, S. S., Lonsdale, C. J., and Greenhill, L. J., "86 GHz VLBI Imaging of the SiO Masers in VX Sgr," in *Radio Emission from Galactic and Extragalactic Compact Sources*, Proceedings of IAU Colloquium 164, eds. J. A. Zensus, G. B. Taylor, and J. M. Wrobel, ASP Conference Series, **144**, 239.
- 1999 Patel, N. A., Greenhill, L. J., Herrnstein, J. R., Zhang, Q., Moran, J. M., Ho, P. T. P., and Goldsmith, P. F., "Proper Motion of Water Masers Associated with IRAS

### Articles in Conference Proceedings (63)

- 21391+5802,” in *Star Formation 1999*, Proceedings of Star Formation 1999, Nagoya, Japan, June 21–25, 1999, eds. T. Nakamoto, 300-301.
- 2000 Greenhill, L. J., “Accretion and Outflow in the Circinus AGN,” in Proceedings of the 5th EVN Symposium, eds. J. Conway, A. Polatidis, and R. Booth, Onsala Space Observatory, 101. (*Invited*)
- 2001 Greenhill, L. J., Moran, J. M., Booth, R. S., Ellingsen, S. P., McCulloch, P. M., Jauncey, D. L., Norris, R. P., Reynolds, J. E., Tzioumis, A. K., and Herrnstein, J. R., “Accretion and Outflow Traced by Water Masers in the Circinus AGN,” in *Galaxies and their Constituents at the Highest Angular Resolutions*, Proceedings of IAU Symposium 205, eds. R. Schilizzi, S. Vogel, F. Paresce, and M. Elvis (San Francisco: ASP), 334-337.
- 2002 Brunthaler, A., Reid, M., Falcke, H., Greenhill, L. J., and Henkel, C., “Towards Proper Motions in the Local Group,” in *6th European VLBI Network Symposium on New Developments in VLBI Science and Technology*, eds. E. Ros, R. W. Porcas, A. P. Lobanov, and J. A. Zensus, (Bonn: MPI), 189.
- 2002 Torrelles, J. M., Patel, N. A., Gómez, J. F., Ho, P. T. P., Rodríguez, L. F., Anglada, G., Garay, G., Greenhill, L., Curiel, S., and Cantó, J., “VLBA multi-epoch water maser observations towards Cepheus A,” in *Cosmic Masers: from Proto-Stars to Black Holes*, Proceedings of IAU Symposium 206, eds. V. Migenes and M. J. Reid (San Francisco: ASP), 84.
- 2002 Greenhill, L. J., “Extragalactic H<sub>2</sub>O Masers,” in *Cosmic Masers: from Proto-Stars to Black Holes*, Proceedings of IAU Symposium 206, eds. V. Migenes and M. J. Reid (San Francisco: ASP), 381. (*Invited*)
- 2002 Monnier, J. D., Greenhill, L. J., Tuthill, P. G., and Danchi, W. C. “Radio and Infrared properties of Dust-Enshrouded Wolf-Rayet Stars,” in *Interacting Winds from Massive Stars*, eds. A. F. J. Moffat and N. St-Louis, ASP Conference Proceedings, **260**, 331.
- 2002 Chandler, C., and Greenhill, L. “The Morphology and Dynamics within 200 AU of the High-Mass Protostar, Source I in Orion BN/KL ,” in *Hot Star Workshop III: The Earliest Phases of Massive Star Birth*, eds. P. A. Crowther, ASP Conference Proceedings, **267**, 357.
- 2003 Torrelles, J. M., Patel, N. A., Ho, P. T. P., Greenhill, L., Gómez, J. F., Rodríguez, L. F., Anglada, G., Garay, G., Curiel, S., and Cantó, J., “Water Maser Microstructures in Cepheus A,” in *Galactic Star Formation Across the Stellar Mass Spectrum*, eds. J. M. De Buizer and N. S. van der Bliet, ASP Conference Series, **287**, 373-376.
- 2003 Greenhill, L. J., Chandler, C. J., Reid, M., J., Diamond, P. J., and Moran, J. M., “The Most Detailed Picture yet of an Embedded High-Mass YSO,” in *Star Formation at the Highest Angular Resolution*, Proceedings of IAU Symposium 221, eds. M. Burton, R.

### Articles in Conference Proceedings (63)

- Jayawardhana, and T. Bourke (San Francisco: ASP), 155.
- 2004 Henkel, C., Braatz, J. A., Tarchi, A., Peck, A. B., Nagar, N. M., Greenhill, L. J., Wang, M., and Hagiwara, Y. "H<sub>2</sub>O Megamasers: Accretion Disks, Jet Interactions, Outflows, or Massive Star Formation?," in *Dense Molecular Gas around Protostars and in Galactic Nuclei*, eds. Y. Hagiwara, W. A. Baan, and H. J. van Langevelde, *ApS&S*, 295, 107-116.
- 2004 Humphreys, E. M. L., Argon, A. L., Greenhill, L. J., Reid, M. J., and Moran, J. M. "The Sub-pc Scale Accretion Disk of NGC 4258," in *Dense Molecular Gas around Protostars and in Galactic Nuclei*, eds. Y. Hagiwara, W. A. Baan, and H. J. van Langevelde, *ApS&S*, 295, 285-289.
- 2004 Kondratko, P. T., Greenhill, L. J., and Moran, J. M., "The Sub-parsec, Geometrically Thick, Self-Gravitating Accretion Disk in the Nucleus of NGC 3079," in *The Interplay Among Black Holes, Stars, and ISM in Galactic Nuclei*," Proceedings of IAU Symposium **222**, eds. Th. Storchi Bergmann, L. C. Ho, and H. R. Schmitt (Cambridge, UK: Cambridge University Press), 325-326.
- 2005 Greenhill, L. J., "Water Masers and Accretion Disks in Galactic Nuclei," in *Future Directions in High Resolution Astronomy: The 10<sup>th</sup> Anniversary of the VLBA*, eds. J. R. Romney and M. J. Reid, ASP Conference Series, **340**, 203. (*invited*)
- 2005 Humphreys, E.M.L., Argon, A.L., Greenhill, L.J., Moran, J.M., and Reid, M.J., "Recent Progress on a New Geometric Distance to NGC 4258," in *Future Directions in High Resolution Astronomy: The 10th Anniversary of the VLBA*, eds. J.D. Romney and M.J. Reid, ASP Conference Series, **340**, 466.
- 2005 Modjaz, M., Moran, J.M., Greenhill, L.J., and Kondratko, P.T., "Magnetic Fields in Accretion Disks of AGN: The Case of NGC 4258," in *Future Directions in High Resolution Astronomy: The 10<sup>th</sup> Anniversary of the VLBA*, eds. J. R. Romney and M. J. Reid, ASP Conference Series, **340**, 192.
- 2005 Ball, G.H., Greenhill, L.J., Moran, J.M., Zaw, I., and Henkel, C., "Parsec-Scale Water Maser Structure in TXS 2226-184," in *Future Directions in High Resolution Astronomy: The 10<sup>th</sup> Anniversary of the VLBA*, eds. J. R. Romney and M. J. Reid, ASP Conference Series, **340**, 235.
- 2005 Greenhill, L.J. and Chandler, C.J., Reid, M.J. and Humphreys, E.M.L., "High-Mass Star Formation in Close-Up: Rotating Outflow & Accretion 10-1000 AU from Embedded Source I in Orion BN/KL," in *Protostars and Planets V*, Proceedings of the Conference held October 24-28, 2005, in Hilton Waikoloa Village, Hawai'i. LPI Contribution No. 1286, 8614.
- 2005 Modjaz, M., Moran, J.M., Greenhill, L.J., and Kondratko, P.T., " Probing the Magnetic Field at Subparsec Radii in the Accretion Disk of NGC 4258," in *Growing Black Holes: Accretion in a Cosmological Context*, Proceedings of the MPA/ESO/MPE/USM Joint Astronomy Conference held at Garching, Germany, 21-25 June 2004. Eds. A. Merloni, S. Nayakshin, and R. A. Sunyaev. ESO astrophysics symposia, 296 -301.



### Articles in Conference Proceedings (63)

- 2005 Henkel, C., Braatz, J. A., Tarchi, A., Peck, A. B., Nagar, N. M., Greenhill, L. J., Wang, M., and Hagiwara, Y., “H<sub>2</sub>O Megamasers: Accretion Disks, Jet Interaction, Outflows or Massive Star Formation?,” *Astrophys. & Space Sci.*, **295**, 107-116.
- 2005 Murphy, D., Preston, R., Fomalont, E., Romney, J., Ulvestad, J., Greenhill, L., and Reid, M., “iARISE: A Next-Generation Two-Spacecraft Space VLBI Mission Concept,” in *Future Directions in High Resolution Astronomy: The 10th Anniversary of the VLBA*, ASP Conference Proceedings **340**, Eds. J. Romney and M. Reid (San Francisco: Astronomical Society of the Pacific), 575.
- 2007 Matthews, L. D., Goddi, C., Greenhill, L. J., Chandler, C. J., Reid, M. J., and Humphreys, E. M. L., “A Documentary of High-Mass Star Formation: Probing the Dynamical Evolution of Orion Source I on 10-100 AU Scales using SiO Masers,” in *Astrophysical Masers and Their Environments*, IAU Symposium 242 Proceedings, eds. J. Chapman & W. Baan (Cambridge: CUP), 130-134.
- 2007 Moran, J.M., Humphreys, E. M. L., Greenhill, L. J., Reid, M. J., and Argon, A., “The Structure of the Accretion Disk in NGC 4258 Derived from Observations of Its Water Vapor Masers,” in *Astrophysical Masers and Their Environments*, IAU Symposium 242 Proceedings, eds. J. Chapman & W. Baan (Cambridge: CUP), 391-398.
- 2007 Braatz, J., Greenhill, L., Reid, M., Condon, J., Henkel, C., and Lo, K.-Y., “Precision Cosmology with H<sub>2</sub>O Megamasers: Progress in Measuring Distances to Galaxies in the Hubble Flow,” in *Astrophysical Masers and Their Environments*, IAU Symposium 242 Proceedings, eds. J. Chapman & W. Baan (Cambridge: CUP), 399-401.
- 2007 Greenhill, L. J., “Masers in AGN Environments,” in *Astrophysical Masers and Their Environments*, IAU Symposium 242 Proceedings, eds. J. Chapman & W. Baan (Cambridge: CUP), 381-390.
- 2008 Reid, M., Brunthaler, A., Ye, X., Xing-Wu, Z., Menten, K., Greenhill, L., and Moscadelli, L., “Mapping the Milky Way and the Local Group,” in *Mapping the Galaxy and Nearby Galaxies*, Astrophysics and Space Science Proceedings (New York: Springer), 19-26.
- 2009 Braatz, J. A., Reid, M. J., Greenhill, L. J., Kuo, C.-Y., Condon, J. J., Lo, K.-Y., and Henkel, C., “Water Masers in AGN Accretion Disks,” in *Approaching Micro-Arcsecond Resolution with VSOP-2: Astrophysics and Technologies*, ASP Conference Proceedings **402**, eds. Y. Hagiwara, E. Fomalont, M. Tsuboi, and Y. Murata (San Francisco: Astronomical Society of the Pacific), 274.
- 2009 Ord, S., Greenhill, L., Wayth, R., Mitchell, D., Dale, K., Pfister, H., and Edgar, R. G., “GPUs for data processing in the MWA,” *ADASS XVIII*, ASP Conference Series, **411**, 127-130.

### Articles in Conference Proceedings (63)

- 2010 Castangia, P., Tilak, A., Kadler, M., Henkel, C., Greenhill, L., and Tueller, J., "X-Ray vs. Water Maser Emission in AGN," in *X-Ray Astronomy 2009: Present Status, Multi-Wavelength Approach and Future Perspectives*, eds. A. Comastri, M. Cappi, and L. Angelini, AIP, **1248**, 347-350.
- 2010 Goddi, C., Matthews, L. D., Greenhill, L. J., Humphreys, E. M. L., and Chandler, C. J. "Accretion and Outflow around Radio Source I in Orion BN/KL," in *Highlights of Astronomy*, **15**, ed. I. F Corbett (Cambridge: CUP), in press.
- 2012 Greenhill, L. J. and Bernardi, G. 2012, "HI Epoch of Reionization Arrays," in *Proceedings of the 11th Asian-Pacific Regional IAU Meeting*, NARIT Conf. Ser. Vol. 1, eds. S. Komonjinda, Y. Kovalev, and D. Ruffolo (Chiang Mai: NARIT), in press (<http://arxiv.org/pdf/1201.1700v1>).
- 2012 Greenhill, L. J., Werthimer, D., Taylor, G. B., and Ellingson, S. W., "A broadband 512-element full correlation imaging array at VHF (LEDA)," in *Electromagnetics in Advanced Applications (ICEAA), 2012 International Conference*, (IEEE), in press.
- 2013 Goddi, C., Greenhill, L., Matthews, L., Humphreys, E., Niederhofer, F., Vaidya, B., Moeckel, N., Chandler, C. "Orion BN/KL: A laboratory for high-mass star formation," in *Protostars and Planets VI*, Heidelberg, July 15-20, poster #1B035.
- 2013 Oberoi, D., Matthews, L.D., Cairns, I.H., Tingay, S.J., Benkevitch, L., Donea, A., White, S.M., Arcus, W., Barnes, D., Bernardi, G., Bowman, J.D., Briggs, F., Burns, S., Bunton, J.D., Cappallo, R.J., Corey, B.E., Deshpande, A., deSouza, L., Emrich, D., Goeke, R., Gaensler, B.M., Greenhill, L.-J., Hazelton, B.J., Herne, D., Johnston-Hollitt, M., Kaplan, D.L., Kasper, J.C., Kincaid, B.B., Koeing, R., Kratzenberg, E., Lonsdale, C.J., Lynch, M.J., McWhirter, S.R., Mitchell, D.A., Morales, M.F., Morgan, E., Ord, S.M., Pathikulungara, J., Prabu, T., Remillard, R.A., Rogers, A.E.E., Roshi, A., Salah, J.E., Sault, R.J., Udaya-Shankar, N., Srivani, K.S., Stevens, J., Subrahmanyam, R., Waterson, M., Wayth, R.B., Webster, R.L., Whitney, A.R., Williams, A., Williams, C.L., Wyithe, J.S.B. "Imaging the Sun with the Murchison Widefield Array, " ASI Conference Series, eds. N. Gopalswamy, S. S. Hasan, P. B. Rao and Prasad Subramanian, **10**, 131 – 135.
- 2014 Price, D.C., Barsdell, B.R., Greenhill, L.J. "Is HDF5 a good format to replace UVFITS?" *Proc. ADASS XXIV*, eds. R. Taylor and J. Stil, ASP Conf. Ser., in press.(arXiv:1411.0507)

### Published Abstracts (90)

- 1986 Moran, J. M., Greenhill, L. J., Reid, M. J., Predmore, C. R., McIntosh, G.C., and Rogers, A. E. E., "The SiO Maser Toward IRC2 in the Orion KL Region" (169th Meeting of the AAS, Pasadena), *Bull. A.A.S.*, **18**, 921.
- 1988 Greenhill, L. J., Moran, J. M., Reid, M. J., Gwinn, C. R., Menten, K. M., and

### Published Abstracts (90)

- Hirabayashi, H., “Proper Motion Study of H<sub>2</sub>O Masers in M33 and the Extragalactic Distance Scale” (173rd Meeting of the AAS, Boston), *Bull. A.A.S.*, **2**, 957.
- 1989 Greenhill, L. J., Moran, J. M., Reid, M. J., Gwinn, C. R., Menten, K. M., Eckart, A., and Hirabayashi, H., “VLBI Observations of H<sub>2</sub>O Masers in the Galaxy M33” (175th Meeting of the AAS, Washington, DC), *Bull. A.A.S.*, **21**, 1188.
- 1991 Greenhill, L. J., and Moran, J. M., “Observations of Extragalactic Water Vapor Masers” (178th Meeting of the AAS, Seattle, WA), *Bull. A.A.S.*, **23**, 899.
- 1991 Degiacomi, C. G., Bester, M., Danchi, W. C., Greenhill, L. J., and Townes, C.H., “High Spatial Resolution of Circumstellar Dust Shells with Long Baseline Interferometry at 11  $\mu\text{m}$ ” (178th Meeting AAS, Seattle, WA), *Bull. A.A.S.*, **23**, 903.
- 1991 Bester, M., Danchi, W. C., Degiacomi, C. G., Greenhill, L. J., and Townes, C.H., “Atmospheric Fluctuations – Deviations from Simple Kolmogorov Approximations and their Effect on High Resolution Astronomy” (178th Meeting AAS, Seattle, WA), *Bull. A.A.S.*, **23**, 895.
- 1993 Greenhill, L. J., Colomer F., Moran, J. M., Backer, D.C., Bester, M.A., Danchi, W. C., and Townes, C. H., “The Circumstellar Envelope of VX Sgr” (182nd Meeting of AAS, Berkeley, CA), *Bull. A.A.S.*, **25**, 824.
- 1993 Argon, A. L., Greenhill, L. J., Reid, M. J., Moran, J. M., Menten, K. M., Henkel, C., and Inoue, M., “First VLBI Observations of Extragalactic Water Vapor Maser Flares in IC10” (182nd Meeting AAS, Berkeley, CA), *Bull. A.A.S.*, **25**, 926.
- 1993 Danchi, W. C., Greenhill, L. J., Bester, M., Degiacomi, C., and Townes, C. H., “Episodic Dust Emission from Alpha Orionis” (182nd Meeting AAS, Berkeley, CA), *Bull. A.A.S.*, **25**, 824.
- 1994 Greenhill, L. J., Moran, J. M., Reid, J. M., Jiang, D. R., Lo, K. Y., and Claussen, M. J., “Water Masers in a Circumstellar Disk in NGC4258?” (184th Meeting AAS, Minneapolis, MN), *Bull. A.A.S.*, **26**, 966.
- 1994 Miyoshi, M., Moran, J. M., Herrnstein, J. R., Greenhill, L. J., Nakai, N., Diamond, P. J., and Inoue, M., “The Brobdingnagian Beast in the Galaxy NGC 4258” (185th Meeting AAS, Tucson, AZ), *Bull. A.A.S.*, **26**, program-updates.
- 1995 Moran, J. M., Greenhill, L. J., and Herrnstein, J. R., “The Spatial Distribution of Water Maser Emission in the NGC 4945 AGN” (187th Meeting AAS, San Antonio, TX), *Bull. A.A.S.*, **27**, 1367.
- 1995 Greenhill, L. J., and Gwinn, C. R., “VLBA Observations of Water Maser Emission in NGC 1068” (187th Meeting AAS, San Antonio, TX), *Bull. A.A.S.*, **27**, 1367.

### Published Abstracts (90)

- 1996 Herrnstein, J. R., Moran, J. M., Greenhill, L. J., Inoue, M., Nakai, N., Miyoshi, M., and Diamond, P. J., “22 GHz Detection of a Radio Continuum Source in the Center of the Masing Molecular Disk in NGC 4258” (187th Meeting AAS, San Antonio, TX), *Bull. A.A.S.*, **28**, 758.
- 1996 Herrnstein, J. R., Greenhill, L. J., and Moran, J. M., “The Warp in the Sub-Parsec-Scale Molecular Disk in NGC 4258 as an Explanation for Persistent Asymmetries in the Water Maser Spectrum” (188th Meeting AAS, Madison, WI), *Bull. A.A.S.*, **28**, 1603.
- 1996 Herrnstein, J. R., Greenhill, L. J., Moran, J. M., Diamond, P. J., Miyoshi, M., Nakai, N., and Inoue, M., “Recent Results from the Masers in NGC 4258: Detection of Nuclear Continuum Emission, and Progress in Deriving a Geometric Distance” (189th Meeting AAS, Toronto, Canada), *Bull. A.A.S.*, **28**, 1420-1421.
- 1996 Trotter, A. S., Moran, J. M., and Greenhill, L. J., “The Sub-Parsec H<sub>2</sub>O Maser and 22 GHz Continuum Emission in NGC 3079” (189th Meeting AAS, Toronto, Canada), *Bull. A.A.S.*, **28**, 1404.
- 1997 Herrnstein, J. R., Moran, J. M., Greenhill, L. J., Inoue, M., Nakai, N., Miyoshi, M., and Diamond, P., “A 4% Geometric Distance to NGC 4258 from Proper Motions in the Nuclear Water Maser” (191st Meeting AAS, Washington, DC), *Bull. A.A.S.*, **29**, 1252.
- 1997 Braatz, J., Greenhill, L., Moran, J., Wilson, A., and Herrnstein, J., “A VLBA Map of the H<sub>2</sub>O Maser in the Nucleus of Seyfert 2 Galaxy NGC 1386” (191st Meeting AAS, Washington, DC), *Bull. A.A.S.*, **29**, 1374.
- 1997 Greenhill, L. J., Trotter, A. S., Bragg, A. E., Moran, J. M., and Herrnstein, J. R., “A Recurring Flare in the NGC 4258 H<sub>2</sub>O Maser” (191st Meeting AAS, Washington, DC), *Bull. A.A.S.*, **29**, 1335.
- 1997 Schwartz, C., Greenhill, L. J., Diamond, P. J., Moran, J. M., and Gwinn, C. R., “Sources of Outflow in the Orion BN/KL Region” (191st Meeting AAS, Washington, DC), *Bull. A.A.S.*, **29**, 1221.
- 1998 Cannizzo, J. K., Greenhill, L. J., Herrnstein, J. R., Moran, J. M., and Mushotzky, R. F., “The X-Ray Properties of NGC 4258” (192nd Meeting AAS, San Diego), *Bull. A.A.S.*, **30**, 872.
- 1998 Bragg, A. E., Greenhill, L. J., Moran, J. M., and Henkel, C., “Acceleration-Derived Positions of the High-Velocity Maser Features in NGC 4258” (193rd Meeting AAS, Austin, TX), *Bull. A.A.S.*, **30**, 1254.
- 1998 Cecil, G., De Pree, C., Greenhill, L., Moran, J., and Dopita, M. A., “Bow-shock Associated with the Active Jet in NGC 4258” (193rd Meeting AAS, Austin, TX), *Bull. A.A.S.*, **30**, 1257.

## Published Abstracts (90)

- 1998 Doeleman, S. S., Lonsdale, C. J., Phillips, R. B., Barvainis, R. E., and Greenhill, L. J., “3 and 7mm SiO Masers in Orion-KL” (193rd Meeting AAS, Austin, TX), *Bull. A.A.S.*, **30**, 1362.
- 1998 Eisner, J. A., Herrnstein, J. R., Greenhill, L. J., and Menten, K. M., “SiO Masers, Water Masers, and Outflow in the W51-IRS2 Star-Forming Region, (193rd Meeting AAS, Austin, TX), *Bull. A.A.S.*, **30**, 1357.
- 1998 Greenhill, L. J., Herrnstein, J. R., Ellingsen, S. P., Reynolds, J. E., Norris, R. P., Moran, J. M., and Booth, R. S., “A View of the Accretion Disk Around the Central Engine of the Circinus Galaxy” (193rd Meeting AAS, Austin, TX), *Bull. A.A.S.*, **30**, 1332.
- 1999 Patel, N., Greenhill, L., Herrnstein, J., Zhang, Q., Moran, J. M., Ho, P. T. P., and Goldsmith, P. F., “Proper Motion of Water Masers in the Star Forming Region IRAS 21391+5802” (194th Meeting AAS, Chicago), *Bull. A.A.S.*, **31**, 898.
- 1999 Greenhill, L., “Water Masers and AGN Structure” (196th Meeting AAS, Rochester), *Bull. A.A.S.*, **32**, 700.
- 2000 Kondratko, P. T., Greenhill, L. J., and Moran, J. M., “Does the Inner Parsec of NGC 3079 Host a Jet, Wind, or a Starburst?” (197th Meeting AAS, San Diego), *Bull. A.A.S.*, **33**.
- 2000 Madejski, G., Done, C., Zycki, P., and Greenhill, L., “Chandra Observations of Highly Obscured Seyfert 2 Galaxy NGC 4945” (32nd Meeting HEAD AAS, Honolulu).
- 2001 Torrelles, J. M., Patel, N. A., Gómez, J. Gomez, Ho, P. T. P., Rodríguez, L. F., Anglada, G., Garay, G., Greenhill, L., Curiel, S., and Cantó, J., “Water Maser Microstructures in Cepheus A” (199th Meeting AAS, Washington), *Bull. A.A.S.*, **33**, 1360.
- 2001 Kunz, M. A., Chandler, C. J., and Greenhill, L. J., “The Proper Motions of SiO Masers around the High-Mass Protostar, Source I, in Orion” (199th Meeting AAS, Washington), *Bull. A.A.S.*, **33**, 1505.
- 2001 Patel, N. A., Greenhill, L. J., Ho, P. T. P., and Moran, J. M., “Water Masers and the Structure of Outflow within 1 AU of a Young Stellar Object” (199th Meeting AAS, Washington), *Bull. A.A.S.*, **33**, 1504.
- 2001 Kondratko, P. T., Greenhill, L. J., and Moran, J. M., “Are Quasars Ejected from the Nucleus of NGC 4258?” (199th Meeting AAS, Washington), *Bull. A.A.S.*, **33**, 1376.
- 2001 Danchi, W. C., Gezari, D. Y., Greenhill, L. J., Najita, J., Monnier, J. D., Tuthill, P. G., and Wishnow, E. H., “Rapid Changes in the Structure of the BN Object” (199th Meeting AAS, Washington), *Bull. A.A.S.*, **34**, 563.

## Published Abstracts (90)

- 2001 Gezari, D. Y., Danchi, W. C., Greenhill, L. J., and Varosi, F., “Mid-Infrared Imaging of Sub-arcsecond Source Structure in Orion BN/KL with the 10-m Keck Telescope: Understanding the Morphology and Energy Budget of the Infrared Complex” (199th Meeting AAS, Washington), *Bull. A.A.S.*, **34**, 561.
- 2002 Greenhill, L. J., “Accretion Disk Structures, Black Hole Masses, and Cosmic Distances” (200th meeting AAS, Albuquerque), *Bull. A.A.S.*, **34**, 724.
- 2002 Seth, A. C., Greenhill, L. J., and Holder, B. P., “Accretion Disk Structures, Black Hole Masses, and Cosmic Distances” (200th meeting AAS, Albuquerque), *Bull. A.A.S.*, **34**, 786.
- 2002 Butler, B. J., Chandler, C. J., Claussen, M. J., and Greenhill, L. J., “Sensitive Search for Water Maser Emission from the Eps Eri, Ups And, and 47 UMa Systems with the VLA” (201st meeting AAS, Seattle), *Bull. A.A.S.*, **34**, 1177.
- 2003 Fruscione, A., Greenhill, L., Moran, J., Filippenko, A., and Herrnstein, J., “Multi-Epoch XMM Observations of NGC4258” (AAS HEAD meeting, Mt. Tremblant), **35**, 2118.
- 2003 Kondratko, P. T., Greenhill, L. J., Moran, J. M., Lovell, J. E. J., Jauncey, D. L., and Kuiper, T. B., “Survey for Water Maser Emission in Active Galactic Nuclei” (203rd meeting AAS, Atlanta), *Bull. A.A.S.*, **35**, #63.09.
- 2003 Modjaz, M., Moran, J. M., Greenhill, L. J., and Kondratko, P. T., “Magnetic Fields in the Accretion Disks of AGN: The Case of NGC 4258” (203rd meeting AAS, Atlanta), *Bull. A.A.S.*, **35**, #55.12.
- 2003 Gezari, D. Y., Danchi, W. C., Greenhill, L. J., and Varosi, F., “Mid-Infrared Imaging of Orion BN/KL with Keck 1 Telescope,” in *Star Formation at the Highest Angular Resolution*, Proceedings of IAU Symposium 221, eds. M. Burton, R. Jayawardhana, and T. Bourke, ASP Conference Series, 212.
- 2003 Modjaz, M., Moran, J. M., Greenhill, L. J., and Kondratko, P. T., “Magnetic Fields in the Accretion Disks of AGN: NGC4258,” in *Quasar Cores and Jets*, 25th meeting of the IAU, Joint Discussion 18, #49.
- 2004 Patel, N., Hunter, T., Sridharan, T., Curiel, S., Torrelles, J., Zhang, Q., Greenhill, L., Beuther, H., Ho, P., Moran, J., Gomez, J., and Anglada, G., “Submillimeter Water Masers and a Circumstellar Disk in Cepheus A” (205th meeting AAS, San Diego), *Bull. A.A.S.*, **36**, #166.03.
- 2004 Gezari, D., Danchi, W., Varosi, F., Elitzur, M., Vinkovic, F., Greenhill, L., and Dwek, E., “Mid-Infrared Imaging of Orion BN/KL with the Keck I Telescope: Temperature, Opacity and Luminosity Distributions Modeled for Extended and Compact Sources” (205th meeting AAS, San Diego), *Bull. A.A.S.*, **36**, #105.15.

## Published Abstracts (90)

- 2004 Fruscione, A., Greenhill, L., Filippenko, V., Moran, J., Herrnstein, J., and Galle, E., “XMM and Chandra Observations of NGC 4258” (205th meeting AAS, San Diego), *Bull. A.A.S.*, **36**, #110.06.
- 2004 Greenhill, L., Argon, A., Bersier, D., Humphreys, E., Macri, L., Moran, J., Reid, M., and Stanek, K., “New Distance Estimates for NGC 4258 – Ramifications for the Extragalactic Distance Scale and Cosmology” (205th meeting AAS, San Diego), *Bull. A.A.S.*, **36**, #73.03.
- 2004 Macri, L., Bersier, D., Greenhill, L., Reid, M., and Stanek, K., “HST/ACS Observations of Cepheid Variables in NGC 4258” (205th meeting AAS, San Diego), *Bull. A.A.S.*, **36**, #73.02.
- 2004 Humphreys, E., Greenhill, L., Reid, M., Argon, A., and Moran, J., “Improved Maser Distance to NGC 4258” (205th meeting AAS, San Diego), *Bull. A.A.S.*, **36**, #73.01.
- 2004 Lonsdale, C., Salah, J., Hewitt, J., Greenhill, L., Cappallo, R., and Morales, M., “The Mileura Widefield Array Demonstrator” (205th meeting AAS, San Diego), *Bull. A.A.S.*, **36**, #49.02.
- 2004 Braatz, J., Henkel, C., Wilson, A., Greenhill, L., and Moran, J., “A GBT Atlas of H<sub>2</sub>O Masers in Galactic Nuclei” (205th meeting AAS, San Diego), *Bull. A.A.S.*, **36**, #27.10.
- 2005 Greenhill, L.J., “The Epoch of Experimentation – Today's Small Programs that Target EOR Science” (207th meeting AAS, Washington, DC), *Bull. A.A.S.*, **37**, #48.05.
- 2005 Macri, L.M., Stanek, K.Z., Bersier, D.F., Greenhill, L.J., and Reid, M.J., “HST Observations of Cepheid Variables in NGC 4258” (207th meeting AAS, Washington, DC), *Bull. A.A.S.*, **37**, #105.06.
- 2005 Humphreys, E.M.L., Greenhill, L.J., Reid, M.J., Beuther, H., Moran, J.M., Gurwell, M., Wilner, D. J., and Kondratko, P. T., “First Detection of Extragalactic Millimeter/Submillimeter H<sub>2</sub>O Maser Emission” (207th meeting AAS, Washington, DC), *Bull. A.A.S.*, **37**, #176.09.
- 2005 Greenhill, L.J., “The Epoch of Experimentation - Today's Small Programs that Target EOR Science” (207th meeting AAS, Washington, DC), *Bull. A.A.S.*, **37**, #48.05.
- 2005 Riess, A. G., Li, W., Stetson, P. B., Filippenko, A. V., Greenhill, L. and Jha, S., “HST Cepheid Calibrations of the Luminosity of Ideal SNe Ia and a Redetermination of the Hubble Constant” (207th meeting AAS, Washington, DC), *Bull. A.A.S.*, **37**, #180.10.
- 2006 Macri, L. M., Stanek, K. Z., Bersier, D., Greenhill, L. J., and Reid, M. J., “Improving the Distance Scale: NICMOS and ACS/HRC Observations of Cepheids in the Maser Galaxy NGC4258” (209th meeting AAS, Seattle, WA), *Bull. A.A.S.*, **39**, #102.07.

## Published Abstracts (90)

- 2007 Greenhill, L. J., Matthews, L. D., Goddi, C., Humphreys, E. M. L., Chandler, C. J., and the KaLYPSO group, "Structure of Accretion and Outflow 10-100 AU from a High-Mass YSO," (210th meeting AAS, Honolulu, Hawaii), *Bull. A.A.S.*, **39(1)**, 1007.
- 2007 Tilak, A., Done, C., Greenhill, L., and Madejski, G., "XMM-Newton Observation of IC 2560" (210th meeting AAS, Honolulu, Hawaii), *Bull. A.A.S.*, **39(1)**, #02.22.
- 2007 Goddi, C., Matthews, L. D., Greenhill, L. J., Humphreys, E. L. M., Reid, M. J., and Chandler, C. J. JENAM-2007, "Our Non-Stable Universe", held 20-25 August 2007, Yerevan, Armenia.
- 2008 Greenhill, L. J., Matthews, L. D., Goddi, C., Humphreys, E. M. L., Chandler, C. J., and KaLYPSO Group, "Structure of Accretion and Outflow 10-100 AU from a High-Mass YSO" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #154.07.
- 2008 Lazio, T. Joseph W., Kasper, J., Jones, D., Burns, J., Furlanetto, S., Weiler, K., MacDowall, R., Demaio, L., Bale, S., Ellingson, S., Greenhill, L., and Taylor, G. B., "The Dark Ages Lunar Interferometer (DALI)" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #135.21.
- 2008 Humphreys, E., Reid, M. J., Greenhill, L. J., Moran, J. M., and Argon, A. L., "The Nature of an AGN Accretion Disk within the Central Parsec: Strengthened Evidence for Spiral Structure" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #118.01.
- 2008 Macri, L. M., Riess, A., Greenhill, L., Stanek, K., and SHOES collaboration, "Cepheids In NGC 4258: New Insights from Gemini And HST" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #55.09.
- 2008 Schneps, M. H., Greenhill, L. J., and Rose, L. T., "Dyslexia and Astronomy" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #31.02.
- 2008 Wayth, R., Dale, K., Greenhill, L. J., Mitchell, D. A., Ord, S., and Pfister, H., "Data Processing Using GPUs for the MWA" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #11.04.
- 2008 Mitchell, D., Greenhill, L., Wayth, R., Ord, S., Sault, R., Doleman, S., Kasper, J., and Morales, M., "The Murchison Widefield Array Real-Time System" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #11.03.
- 2008 Ord, S., Wayth, R., Mitchell, D., and Greenhill, L., "The MWA Survey" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #11.02.
- 2008 Lonsdale, C. J., and MWA Collaboration, "The Murchison Widefield Array" (211th meeting AAS, Austin, TX), *Bull. A.A.S.*, **39(4)**, #11.01.



## Published Abstracts (90)

- 2009 Greenhill, L. J., Backer, D. C., Carilli, C. L., and Furlanetto, S. R., “Reionization: Future Directions at cm/m-Wavelengths” (213th meeting AAS, Long Beach, CA), *Bull. A.A.S.*, **41(1)**, #339.03.
- 2009 Goddi, C., Greenhill, L. J., Matthews, L. D., Humphreys, E. L. M., and Chandler, C. J., “3-D Dynamical Evolution of the High-Mass Young Stellar Object Source I in Orion BN/KL On Scales 10-100 AU As Traced By SiO Masers” (213th meeting AAS, Long Beach, CA), *Bull. A.A.S.*, **41(1)**, #347.03.
- 2009 Matthews, L. D., Goddi, C., Greenhill, L. J., Chandler, C. J., Humphreys, E. M. L., and Reid, M. J., “Proper Motions of the SiO Masers Surrounding the Young Stellar Object Orion Source I” (213th meeting AAS, Long Beach, CA), *Bull. A.A.S.*, **41(1)**, #439.10.
- 2009 Braatz III, J. A., Reid, M., Humphreys, E., Kuo, C., Condon, J., Lo, K. Y., Greenhill, L., Henkel, C., Zaw, I., and Tilak, A., “The Megamaser Cosmology Project: The Maser Distance to UGC 3789” (214th meeting AAS, Pasadena, CA), *Bull. A.A.S.*, **41(2)**, #302.03.
- 2009 Kuo, C.-Y., Braatz III, J. A., Lo, K. Y.; Condon, J., Reid, M., Greenhill, L., and Henkel, C., “The Megamaser Cosmology Project: The Maser Disk and Distance to NGC 6323” (214th meeting AAS, Pasadena, CA), *Bull. A.A.S.*, **41(2)**, #413.05.
- 2009 Harris, R. J., Greenhill, L., Ord, S., Lazio, J., Kassim, N., Perley, R., “Results of 74 & 330 MHz VLA Observations of the Perseus Cluster with Application to Cosmological Interferometric Arrays” (214th meeting AAS, Pasadena, CA), *Bull. A.A.S.*, **41(2)**, #415.01.
- 2011 Zaw, I., Zhu, G., Blanton, M., and Greenhill, L., “The Host Galaxies of Circumnuclear Water Masers” (217th meeting AAS, Seattle, WA), *Bull. A.A.S.*, **43(2)**, #430.09.
- 2011 Greenhill, L. J., and Backer, D. C. “Hydrogen Epoch of Reionization Arrays” (217th meeting AAS, Seattle, WA), *Bull. A.A.S.*, **43(2)**, #107.10.
- 2011 Bernardi, G., Mitchell, D., Ord, S., Greenhill, L., Pindor, B., Wayth, R., and Wyithe, S. “Subtraction of Point Sources from Interferometric Radio Images Through an Algebraic Forward Modeling Scheme” (217th meeting AAS, Seattle, WA), *Bull. A.A.S.*, **43(2)**, #116.07.
- 2011 Schneps, M. H., Brockmole, J. R., Rose, L. T., Pomplun, M., Sonnert, G., and Greenhill, L. J., “Dyslexia Linked to Visual Strengths Useful in Astronomy” (217th meeting AAS, Seattle, WA), *Bull. A.A.S.*, **43(2)**, #215.08.
- 2012 Greenhill, L.J., Werthimer, D., Taylor, G., Ellingson, S., LEDA Collaboration “HI at  $z \sim 20$ : The Large Aperture Experiment to Detect the

## Published Abstracts (90)

- Dark Ages, " (220<sup>th</sup> meeting AAS, Anchorage, AK), *Bull. A.A.S.* **44(4)**, #104.03
- 2014 Mei, M.-Y.J., Zaw, I., Greenhill, L.J.\ "Correlations of Circumnuclear Water Maser Luminosity with AGN Activity and SMBH Mass," (223<sup>rd</sup> meeting AAS, Washington, DC), *Bull. A. A. S.* **46(2)**, #251.06
- 2014 Greenhill, L.J., LEDA Collaboration "In Pursuit of the Thermal State of the IGM at Redshift 20: Radio Foreground Characterization, " (223<sup>rd</sup> meeting AAS, Washington, DC), *Bull. A. A. S.* **46(2)**, #102.03
- 2014 Barsdell, B.R., Clark, M.A., Greenhill, L.J. "Petascale cross correlation in software," in Exascale Radio Astronomy, *AAS Topical Conference Series, 2*, *Bull. A. A. S.* **46(3)**, #302.03
- 2014 Clark, M.A., Barsdell, B.R., Greenhill, L.J. "Exascale cross correlation in software, " in Exascale Radio Astronomy, *AAS Topical Conference Series, 2*, *Bull. A. A. S.* **46(3)**, #302.02
- 2014 Greenhill, L.J., Kocz, J., Barsdell, B.R., Clark, M.A., LEDA Collaboration "The Cosmological Dark Age Real-time Computing (LEDA)," in Exascale Radio Astronomy, *AAS Topical Conference Series, 2*, *Bull. A. A. S.* **46(3)**, #103.01
- 2015 Greenhill, L.J., LEDA Collaboration "Constraining the Thermal State of the IGM at  $z \sim 20$ , " (225<sup>th</sup> meeting AAS, Seattle, WA), *Bull. A. A. S.* **47(2)**, #403.07
- 2015 Kuiper, T.B.H., Baines, G., Franco, M., Greenhill, L.J., Horiuchi, S., Moin, A., Olin, T., Price, D., Smith, S., Soni, A., Teitelbaum, L., Zaw, I.\ "Spectroscopic Capability of a New 17--27 GHz Dual-Horn Receiver on the NASA 70 m Canberra Antenna, " (225<sup>th</sup> meeting AAS, Seattle, WA), *Bull. A. A. S.* **47(2)**, #337.01
- 2015 Hallinan, G., Bourke, S., Anderson, M., Eastwood, M., Monroe, R., Greenhill, L.J., Taylor, G.B., Lazio, J., Weinreb, S.\ "Monitoring All the Sky All the Time with the Owens Valley Long Wavelength Array, " (225<sup>th</sup> meeting AAS, Seattle, WA), *Bull. A. A. S.* **47(2)**, #328.01