

PUBLICATIONS

NATIONAL ASTRONOMY & IONOSPHERE CENTER Publication Statistics FY2001 – FY2005



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NAIC Publication Statistics FY2001 – FY2005

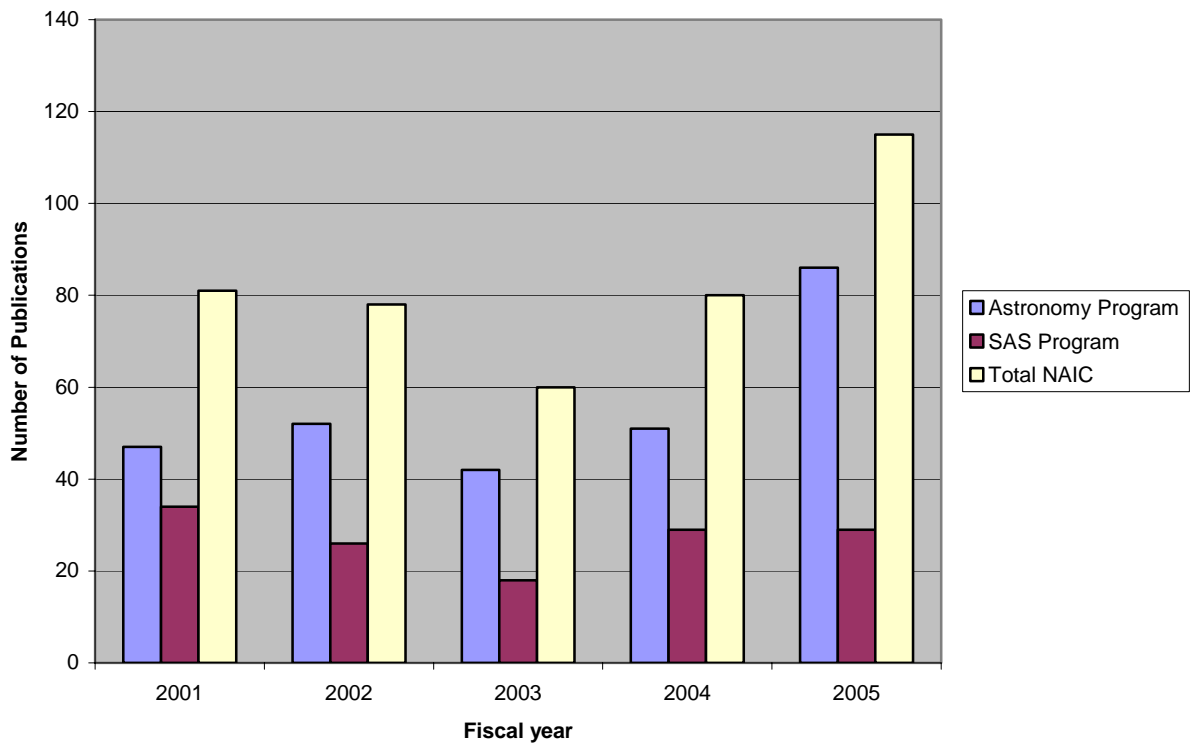
Overview

The two major research programs at NAIC are the Radio Astronomy Program and the Space and Atmospheric Sciences (SAS) Program. The NAIC research facilities at the Arecibo Observatory to support these two programs are complementary and share much of the same Observatory infrastructure. The research culture of these two communities is distinct in several ways, one of them being that a main communication channel among astronomers are the numerous and frequent topical meetings; in the SAS community there are fewer meetings, but extremely large meetings of the whole community such as the annual meeting of the American Geophysical Union. These differences show up in the publication statistics for a national institution such as NAIC that supports both research endeavors.

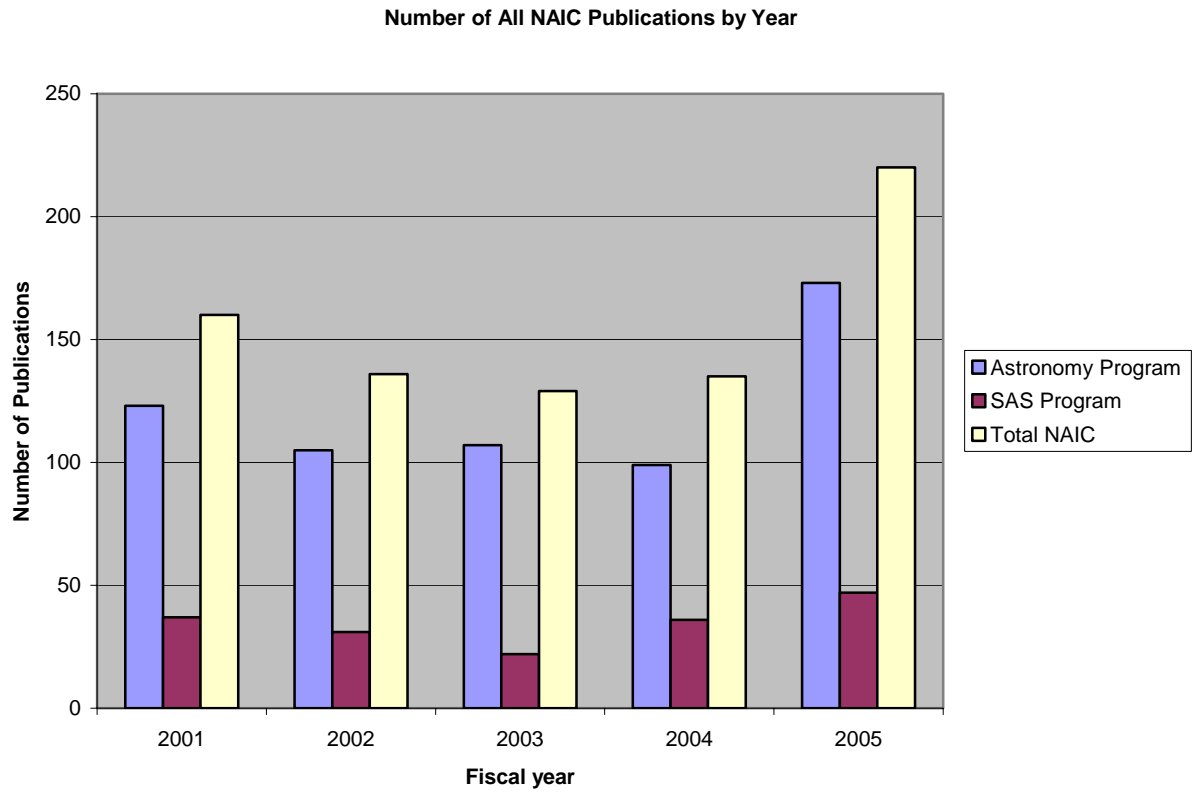
In this report we assemble the NAIC publications resulting from the work of both communities of researchers at the Arecibo Observatory for the period FY2001 – FY2005. We provide a graphical overview of the NAIC publications by year, a tabulation of the number of publications by year, and an ordered list of all the publications each with its journal reference.

1. Publications in Refereed Journals

NAIC Publications in Refereed Journals by Year



2. All Publications, Including Research Publications in Conference Proceedings.



NAIC Publication Statistics FY2001 – FY2005

	Radio Astronomy Program			SAS Program	TOTAL
	Passive Astronomy	Planetary Radar	Subtotal		
FY2001					
Refereed Journals	37	10	47	34	81
Conference Proceedings	59	17	76	3	79
Subtotal	96	27	123	37	160
FY2002					
Refereed Journals	41	11	52	26	78
Conference Proceedings	40	13	53	5	58
Subtotal	81	24	105	31	136
FY2003					
Refereed Journals	37	5	42	18	60
Conference Proceedings	51	14	65	4	69
Subtotal	88	19	107	22	129
FY2004					
Refereed Journals	37	14	51	29	80
Conference Proceedings	42	6	48	7	55
Subtotal	79	20	99	36	135
FY2005					
Refereed Journals	74	12	86	29	115
Conference Proceedings	56	31	87	18	105
Subtotal	130	43	173	47	223

NAIC/ARECIBO OBSERVATORY PUBLICATIONS

October 2000 – September 2001

This list of publications includes papers that result from NAIC support as well as from AO data.

**Bolded names are individuals who are currently scientific staff members, or were at the time of publication submission.*

RADIO ASTRONOMY

Refereed Journals:

Becker, W., J. Trumper, A.N. Lommen, and D.C. Backer, *X-Rays from the Nearby Solitary Millisecond Pulsar PSR J0030+0451: The Final ROSAT Observations*, *Astrophys. J.*, 545(2), pp. 1015-1019, Dec 2000

Bhat, N.D.R., Y. Gupta, and A.P. Rao, *Pulsar Observations and Structure of the Local ISM*, *Astron. & Space Sci.*, 276(1), pp. 227-231, Jan 2001

Brown, M.E., J.L. Margot, W.M. Keck II, I. de Pater, and H. Roe, *S/2001 (87) 1*, *IAU Circ.*, ed. D.W.E. Green, 7588, p. 1, Sept 2001

Burton, W.B., R. Braun, and J.N. Chengalur, *Arecibo Imaging of Compact High-Velocity Clouds*, *Astron. & Astrophys.*, 369(2), pp. 616-642, April 2001 [*Times Cited: 14*]

Burton, W.B., R. Braun, and J.N. Chengalur, *Correction: Arecibo Imaging of Compact High-Velocity Clouds*, *Astron. & Astrophys.*, 375(1), p. 227, Aug 2001 [*Times Cited: 4*]

Chatterjee, S., J.M. Cordes, T.J.W. Lazio, W.M. Goss, E.B. Fomalont, and J.M. Benson, *Parallax and Kinematics, of PSR B0919+06 From VLBA Astrometry and Interstellar Scintillometry*, *Astrophys. J.*, 550(1), pp. 287-296, March 2001

Darling, J. and R. Giovanelli, *A Search for OH Megamasers at $Z > 0.1$. II. Further Results*, *Astron. J.*, 121(3), pp. 1278-1293, March 2001 [*Times Cited: 17*]

Deshpande, A.A. and J.M. Rankin, *The Topology and Polarization of Sub-Beams Associated with the 'Drifting' Sub-pulse Emission of Pulsar B0943+10 - I. Analysis of Arecibo 430- and 111 - MHz Observations*, *MNRAS*, 322(3), pp. 438-460, April 2001 [*Times Cited: 34*]

Eder, J. and J.M. Schombert, *Gas Rich Dwarfs from the PSS-II III: HI Profiles and Dynamical Masses*, *Astrophys. J. Suppl.*, 131(1), pp. 47-70, Nov 2000 [*Times Cited: 7*]

Everett, J.E. and J.M. Weisberg, *Emission Beam Geometry of Selected Pulsars Derived from Average Pulse Polarization Data*, *Astrophys. J.*, 553(1), pp. 341-357, May 2001

Freire, P.C., M. Kramer, and A.G. Lyne, *Determination of the Orbital Parameters of Binary Pulsars*, *MNRAS*, 322(4), pp. 885-890, April 2001

Freire, P.C., M. Kramer, A. G. Lyne, F. Camilo, R. N. Manchester, and N. D'Amico, *Detection of Ionized Gas in the Globular Cluster 47 Tucanae*, *Astrophys. J. Lett.*, 557(2), pp. L105-L108, Aug 2001

- Freire**, P.C., F. Camilo, D.R. **Lorimer**, A.G. Lyne, R.N. Manchester, and N. D'Amico, *Timing the Millisecond Pulsars in 47 Tucanae*, MNRAS, 326(3), 901-915, Sept 2001
- Heiles, C., *New Temperatures of Diffuse Interstellar Gas: Thermally Unstable Gas*, Astrophys. J. Lett., 551(1), pp. L105-L108, April 2001 [*Times Cited: 28*]
- Jenet, F.A., S.B. Anderson and T.A. Prince, *Single-Pulse Characteristics of the Millisecond Radio Pulsar PSR B1937+21 at 430 MHz*, Astrophys. J., 546(1), pp. 394-400, Jan 2001 [*Times Cited: 8*]
- Jenet, F.A., S.B. Anderson and T.A. Prince, *The First Detection of Coherent Emission from Radio Pulsars*, Astrophys. J., 558(1), pp. 302-308, Sept 2001 [*Times Cited: 5*]
- Jiang, B-W. and S-M. Jia, *Distribution of SiO and OH Maser Stars in the Galactic Plane*, Chinese Astron. Astrophys., 1, pp. 144-151, April 2001
- Kanekar, N., T. **Ghosh**, and J.N. Chengalur, *Detection of a Multi-phase ISM at $z = 0.2212$* , Astron. Astrophys., 373, pp. 394-401, July 2001 [*Times Cited: 9*]
- Kurtz, S., R. Cesaroni, E. Churchwell, P. Hofner, and C.M. Walmsley, *Hot Molecular Cores and the Earliest Phases of High-Mass Star Formation*, in *Protostars and Planets IV*, (Book - Tucson: Univ. of Arizona Press; eds. V. Mannings, A.P. Boss, S.S. Russell), p. 299, 2000
- Lewis, B.M., *On 2MASS Identifications for OH/IR Stars*, Astron. J., 121(1), pp. 426-431, Jan 2001
- Lewis**, B.M., *The Approaching Death of the OH/IR Star IRAS 18455+0448*, Astrophys. J. Lett., 548(1), pp. L77-L80, Feb 2001
- Lommen, A.N., A. Zepka, D.C. Backer, M. McLaughlin, J.M. Cordes, Z. Arzoumanian, and K. **Xilouris**, *New Pulsars from Arecibo Drift Scan Search*, Astrophys. J., 545(2), pp. 1007-1014, Dec 2000 [*Times Cited: 11*]
- Lorimer**, D.R. and K.M. **Xilouris**, *PSR J1907+0918 - A Young Radio Pulsar Near SGR 1900+14 and G42.8+0.6*, Astrophys. J., 545(1), pp. 385-389, Dec 2000 [*Times Cited: 17*]
- Nicastro, L., B.M. Gaensler, and M.A. McLaughlin, *Radio Observations of the 33.8 ms X-ray Pulsar SAX J0635+0533*, Astron. Astrophys., 362, pp. L5-L8, Oct 2000 [*Times Cited: 1*]
- Nice, D.J., E. Splaver, and I.H. Stairs, *On the Mass and Inclination of the PSR J2019 +2425 Binary System*, Astrophys. J., 549(1), pp. 516-521, March 2001
- O'Neil**, K., P. Hofner, and E. Schinnerer, *First Detection of CO in a Low Surface Brightness Galaxy*, Astrophys. J. Lett., 545(2), pp. L99-L102, Dec 2000
- Pisano, D.J., H.A. Kobulnicky, R. Guzmán, J. Gallego, and M.A. Bershadsky, *The Gas Content and Kinematics of Nearby Blue Compact Galaxies: Implications for Studies at Intermediate and High Redshift*, Astron. J., 122(3), pp. 1194-1212, Sept 2001 [*Times Cited: 14*]
- Rose, J.A., A.E. Gaba, A.E., N. Caldwell, and B. Chaboyer, *Starbursts Versus Truncated Star Formation in Nearby Clusters of Galaxies*, Astron. J., 121(2), pp. 793-807, Feb 2001 [*Times Cited: 18*]

- Saikia, D.J., S. Jeyakumar, C.J. **Salter**, P. Thomasson, R.E. Spencer, and F. Mantovani, *A Compact Steep-Spectrum Sources from the S4 Sample*, MNRAS, 321(1), pp. 37-43, Feb 2001
- Schombert, J.M., S.S. McGaugh, and J.A. Eder, *Gas Mass Fractions and the Evolution of Low Surface Brightness Dwarf Galaxies*, Astron. J., 121(5), pp. 2420-2430, May 2001
- Simon, R., J.M. Jackson, D.P. Clemens, and T.M. Bania, *The Structure of Four Molecular Cloud Complexes in the BU-FCRAO Milky Way Galactic Ring Survey*, Astrophys. J., 551, pp. 747-763, April 2001
- Smoker, J.V., N. Lehner, F.P. Keenan, E.J. Totten, E. Murphy, K.R. Sembach, R.D. Davies, and B. Bates, *HI and Optical Spectroscopy Towards the M15 Intermediate-Velocity Cloud*, MNRAS, 322(1), pp. 13-21, March 2001 [*Times Cited: 4*]
- Stanimirovic**, S. and A. Lazarian, *Velocity and Density Spectra of the Small Magellanic Cloud*, Astrophys. J. Lett., 551(1), pp. L53-L56, April 2001
- Stanimirovic**, S., *What is the Behavior of the ISM in the SMC?*, Astrophys. Space Sci. Suppl., 277(1), pp. 87-90, Jan 2001
- Stinebring, D.R., M.A. McLaughlin, J.M. Cordes, K.M. Becker, J.E. Espinoza Goodman, M.A. Kramer, J.L. Sheckard, and C.T. Smith, *Faint Scattering Around Pulsars: Probing the Interstellar Medium on Solar System Size Scales*, Astrophys. J. Lett., 549(1), pp. L97-L100, March 2001 [*Times Cited: 9*]
- van Driel, W., Y. Gao, and D. Monnier-Ragaine, *HI Line Observations of Luminous Infrared Galaxy Mergers*, Astron. Astrophys., 368, pp. 64-73, March 2001 [*Times Cited: 3*]
- Zwaan, M.A., *A Targeted Survey for HI Clouds in Galaxy Groups*, MNRAS, 325(3), pp. 1142-1148, Aug 2001 [*Times Cited: 26*]

Conference Proceedings:

- Backus, P.R. and Project Phoenix Team, *Project Phoenix: SETI Observations from 1200 to 1750 MHz with the Upgraded Arecibo Telescope*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 900, May 2001
- Bhat**, N.D.R., Y. Gupta, A.P. Rao, and P.B. Preethi, *Pulsar Scintillation Studies and Structure of the Local Interstellar Medium*, ASP Conf. Ser. No. 202, Proc. of IAU Coll. 177: Pulsar Astronomy - 2000 and Beyond, Bonn, Germany, 30 Aug - 3 Sept. 1999, pp. 545-548, 2000
- Bhat**, N.D.R., Y. Gupta, and A. P. Rao, *Constraints on the Interstellar Plasma Turbulence Spectrum from Pulsar Observations at the Ooty Radio Telescope*, ASP Conf. Ser. No. 202, Proc. of IAU Coll. 177: Pulsar Astronomy - 2000 and Beyond, Bonn, Germany, 30 Aug - 3 Sept. 1999, pp. 553-554, 2000
- Bhat**, N.D.R., M. Kramer, Y. Gupta, and H.C. Lambert, *Results from High Frequency Pulsar Scintillation Studies with Effelsberg*, 197th AAS Meeting, San Diego, CA, January 7-11, 2001, BAAS, 32(4), p. 1502, Dec 2000

- Brooks, A., S. **Stanimirovic**, J.M. Dickey, A. Hedden, and A. Kirchner, *The Northern Tip of the Magellanic Stream*, 197th AAS Meeting, San Diego, CA, January 7-11, 2001, BAAS, 33(1), p. 722, Dec 2000
- Cabanela, J.E. and J.M. Dickey, *A Successful Automated Search for Crouching Giants*, 197th AAS Meeting, San Diego, CA, January 7-11, 2001, BAAS, 32(4), p. 1524, Dec 2000
- Chandler, A. M., S.B. Anderson, S.R. Kulkarni, T.A. Prince, *Caltech-Arecibo Pulsar Drift Survey and Globular Cluster Searches*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 900, May 2001
- Chin, D. and K. **O'Neil**, *Extended HI Envelopes Around Low Surface Brightness Galaxies*, 197th AAS Meeting, San Diego, CA, January 7-11, 2001, BAAS, 32(4), p. 1459, Dec 2000
- Darling, J. and R. Giovanelli, *The Arecibo OH Megamaser Survey and the Galaxy Merger Rate*, in ASP Conf. Proc., Gas & Galaxy Evolution, Socorro, NM, May 21-24, 2000, eds. J.E. Hibbard, M. Rupen, and J.H. van Gorkom, 240, p. 200, 2001
- Darling, J. and R. Giovanelli, *OH Megamasers: Luminous Radio Beacons of Merging Galaxies*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 830, May 2001
- Darling, J. and R. Giovanelli, *Observing OH Megamasers with the Upgraded Arecibo Telescope*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 917, May 2001
- Eder, J., K. **O'Neil**, G.D. Bothun, and J. Schombert, *Exploring the Sensitivity Limit: 21-cm Observations of Low Surface Brightness Galaxies with the Arecibo Telescope*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 901, May 2001
- Eder, J. and K. **O'Neil**, *21 cm Spectroscopy with the Upgraded Arecibo Telescope*, in ASP Conf. Series, Gas & Galaxy Evolution, Socorro, NM, May 21-24, 2000, eds. L.E. Hibbard, M.P. Rupen, and J.H. van Gorkom, 240, p. 462, 2001
- Espinoza Goodman, J.E., K.M. Becker, J.M. Cordes, M.A. Kramer, M.A. McLaughlin, J.L. Sheekard, T.C.T. Smith, and D.R. Stinebring, *Faint Scattering Around Pulsars: High-Q Features in Dynamic Spectra*, 197th AAS Meeting, San Diego, CA January 7-11, 2001, BAAS, 32(4), p. 1544, Dec 2000
- Fauci, F. and L. Burderi, *An Upper Limit on the Power-Law Index of the Radio Spectrum of Geminga*, American Astronomical Society, 32nd High Energy Astrophysics Mtg., Honolulu, HI, 5-10 Nov 2000, 32, p. 1652, 2000
- Fomalont, E., Hirabayashi, H., ..., **Salter**, C., ..., *Astrophysical Phenomena Revealed by Space VLBI*, Proc. VSOP Symp., eds. H. Hirabayashi, P.G. Edwards, and D.W. Murphy, Publ. ISAS, Kanagawa, p. 167, 2000
- Frey, S., L.I. Gurvits, D.R. **Altschuler**, M.M. **Davis**, P. **Perillat**, C. **Salter**, H.D. Aller, M.F. Aller, and H. Hirabayashi, *Dual-Frequency VSOP Observations of AO 0235+164*, Publ. Astron. Soc. Japan, 52, pp. 975-982, Dec 2000

- Frierson, D.M., T. **Ghosh**, C. **Salter**, and J. **Eder**, *Neutral Hydrogen in Seyfert Galaxies - Testing Implications of Unified Schemes*, 195th AAS Meeting, Atlanta, GA, Jan. 12-15, 2000, *BAAS*, 32(2), p. 878, May 2001
- Ghosh** T., J.A. **Eder**, C.J. **Salter**, and D.M. Frierson, *Neutral Hydrogen in Seyfert Galaxies - A Test for the Unification Scheme*, ASP Conf. Series; Gas and Galaxy Evolution, eds. J.E. Hibbard, M. Rupen, and J.H. van Gorkom, 240, p. 414, 2001
- Goldsmith**, P.F., *Molecular Depletion and Thermal Balance of Dark Cloud Cores*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, *BAAS*, 32(4), p. 1434, Dec 2000
- Gupta, Y, P. Gothoskar, B.C. Joshi, M. Vivekanand, R. Swain, S. Sirothia, and N.D.R. **Bhat**, *Pulsar Research with the GMRT: A Status Report*, ASP Conf. Ser. No. 202, Proc. of IAU Coll. 177: Pulsar Astronomy - 2000 and Beyond, Bonn, Germany, 30 Aug - 3 Sept 1999, pp. 277-278, 2000
- Hainline, L.J. and J. **Eder**, *Kinematics of Dwarf Irregular Galaxies*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, *BAAS*, 32(4), p. 1533, Dec 2000
- Hemboldt, J.F., R.A.M. Walterbos, G.D. Bothun, W.J.G. de Blok, and K. **O'Neil**, *Star Formation Properties of HIPASS Galaxies I: Sample Characteristics*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, *BAAS*, 33(2), p. 906, May 2001
- Hirabayashi, H.,...T. **Ghosh**,...et al., *The VSOP 5 GHz AGN Survey I. Compilation and Observations*, Publ. of the Astron. Soc. of Japan, 52, pp. 997-1014, Dec 2000
- Horn, J.M.M., M. Morris, and P. Wannier, *Atomic and Molecular Gas in the Blue Compact Galaxy II Zw 44*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, *BAAS*, 33(2), p. 800, May 2001
- Kirchner, A. and N.D.R. Bhat , *Wisp-like Features in Secondary Spectra of Pulsar Scintillation*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, *BAAS*, 32(4), p. 1484, Dec 2000
- Kleban, R.P. and P.F. **Goldsmith**, *Small Scale Structure in the Taurus Molecular Cloud: OH and CO Observations Towards Six Extragalactic Continuum Sources*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, *BAAS*, 32(4), p. 1394, Dec 2000
- Korpela, E.J., E.M. Heien, and D. Werthimer, *Pulse Detection Algorithms for Use in SETI @home*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, *BAAS*, 32(4), p. 1492, Dec 2000
- Lewis**, B.M., *Examples of the Birth & Death of OH/IR Stars*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, *BAAS*, 32(4), p. 1571, Dec 2000
- Lewis**, B.M., *Changes in the OH Emission of the Hypergiant Star IRAS 19566+3423*, in ASP Conf. Series, Eta Carinae and Other Mysterious Stars: The Hidden Opportunities of Emission-Line Spectroscopy, Hven, Sweden, Aug 24-26, 2000, eds. T. Gull, S. Johansson, and K. Davidson, 242, p. 167, 2001
- Lewis**, B.M., *IRAS 18455+0448: The Birth & Death of OH/IR Stars*, in Proc. of Torun Workshop, Post-AGB Objects as a Phase of Stellar Evolution, Torun, Poland, July 5-7, 2000, eds. S. Szczerba and S. Gornay (Kluwer Academic Publishers), 265, p. 423, 2001

- Li, D. and P.F. **Goldsmith**, *Massive Quiescent Cores in Orion*, 197th AAS Meeting, San Diego, CA, January 7-11, 2001, BAAS, 32(4), p. 1433, Dec 2000
- Lommen, A.N. and D.C. Backer, *High Frequency Studies of Millisecond Pulsars, and Limits on Gravitational Radiation from Sagittarius A* Using the Pulsar Timing Array*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 917, May 2001
- Lorimer**, D.R., *Neutron Star Birth Rates*, in *The Neutron Star - Black Hole Connection*, Proc. of the NATO Advanced Study Inst., Elounda, Crete, Greece, 7-18 June 1999. Eds. C. Kouveliotou et al. Dordrecht: Kluwer Academic Publishers, 2001
- Lorimer**, D.R., *Radio Pulsars-An Observer's Perspective*, in *The Neutron Star - Black Hole Connection*, Proc. of the NATO Advanced Study Inst., Elounda, Crete, Greece, 7-18 June 1999. Eds. C. Kouveliotou et al. Dordrecht: Kluwer Academic Publishers, 2001
- Mantovani, F., W. Junor, D.J. Saikia, and C.J. **Salter**, *Milliarcsecond Scale Rotation Measure in Two CSS*, in ASP Conf. Ser., Proc. of IAU Symp. 205 - Galaxies and Their Constituents at the Highest Angular Resolutions, Manchester, England, August 2000, eds. Richard T. Schilizzi, Stuart N. Vogel, Francesco Paresce, and Martin S. Elvis, p. 83, 2001
- Molotov, I.E., A.A. Chuprikov, C.J. **Salter**, and T. **Ghosh**, *The Possibility for Collaboration of Arecibo with an International S2 Ad-Hoc Array*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 899, May 2001
- Nowakowski, L.A. and N.S. Rivera, *New Observations of Mode Switching and Average Profile of PSR 0611+22*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, BAAS, 33(1), p. 715, Dec 2000
- O'Neil**, K., *The Morphology, Color, and Gas Content of Low Surface Brightness Galaxies*, in ASP Conf. Series, Proc. of the 3rd Guillermo Haro Astrophysics Conf., Cosmic Evolution and Galaxy Formation: Structure, Interactions, and Feedback, Puebla, Mexico, Feb. 23-29, 2000, eds. J. Franco, E. Terlevich, O. Lopez-Cruz, and I. Aretxaga, 215, p. 178, 2000
- O'Neil**, K., *Gas, Stars and Baryons in Low Surface Brightness Galaxies*, in ASP Conf. Proc., Stars, Gas & Dust in Galaxies: Exploring the Links, a Serena, Chile, March 15-18, 2000, eds. D. Alloin, K. Olsen, and G. Galaz, 221, p. 199, 2000
- O'Neil**, K., *The First Optical Spectroscopy of Red LSB Galaxies, and the Possible Discovery of the Largest Galaxy Known*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, BAAS, 32(4), p. 1501, Dec 2000
- O'Neil**, K., *The Gas Content and Stellar Population of Red Low Surface Brightness Galaxies*, in ASP Conf. Series, Gas & Galaxy Evolution, Socorro, NM, May 21-24, 2000, eds. L.E. Hibbard, M.P. Rupen, and J.H. van Gorkom, 240, p. 340, 2001
- O'Neil**, K., J. Eder, G. Bothun, and J. Schombert, *Exploring the Sensitivity Limit: 21-cm Observations of Low Surface Brightness Galaxies*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 901, May 2001
- O'Neil**, K., *Optical Spectroscopy of Red LSB Galaxies*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 909, May 2001

- O'Neil, K.**, *Observing with the Upgraded Arecibo Telescope: An Introduction*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 917, May 2001
- O'Neil, K.**, *The Gas Content and Stellar Population of Red Low Surface Brightness Galaxies*, in ASP Conf. Series, Gas & Galaxy Evolution, Socorro, NM, May 21-24, 2000, eds. L.E. Hibbard, M.P. Rupen, and J.H. van Gorkom, 240, p. 340, 2001
- Riera, A., B. Balick, G. Mellema, K. **Xilouris**, and Y. Terzian, *The Complex Ionization Structure of the Planetary Nebula Hubble 5*, in ASP Conf. Series, Asymmetrical Planetary Nebulae II: From Origins to Microstructures, Cambridge, MA, Aug 3-6, 1999, eds. J.H. Kastner, N. Soker, and S. Rappaport, 199, p. 297, Nov 2000
- Robishaw, T., J.D. Simon, L. Blitz, and C.E. Heiles, *Arecibo Mapping of HI in High-Velocity Clouds and Dwarf Galaxies*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 918, May 2001
- Rosenberg, J.L. and S.E. Schneider, *The Arecibo Dual-Beam Survey: Filling the Gaps in the Extragalactic Census*, in ASP Conf. Proc., Mapping the Hidden Universe: The Universe Behind the Milky Way - The Universe in HI, Guanajuato, Mexico, Feb. 23-29, 2000, eds. R.C. Kraan-Korteweg, P.A. Henning, and H. Andernach, 218, p. 223, 2000
- Saikia, D.J., W. Junor, F. Mantovani, R. Ricci, and C.J. **Salter**, *Rotation Measures in Two CSSs*, in Proc. of the 5th European VLBI Network Symposium (2000), held at Chalmers Technical University, June 29-July 1, 2000, eds. J.E. Conway, A.G. Polatidis, R.S. Booth and Y. Pihlström, p. 91, 2000
- Salter, C.J.** and T. **Ghosh**, *Arecibo Spectral Baselines in the Presence of Continuum Emission*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 900, May 2001
- Splaver, E.M. D.J. Nice, D.R. **Lorimer**, D.G. Khechinashvili, and G.I. Melikidze, *Probing the Eclipse Region of PSR B1957+20*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 900, May 2001
- Spuck, T.S. and J.R. Fisher, *Research Experience for Teachers at NRAO-Green Bank: Measuring HI Luminosity-linewidth Profiles of Faint Galaxies*, 197th AAS Meeting, San Diego, CA January 7-11, 2001, BAAS, 32(4), p. 1554, Dec 2000
- Stairs, I.H., S.E. Thorsett, J.H. Taylor, and Z. Arzoumanian, *Recent observations of PSR B1534+12, Galaxies and their Constituents at the Highest Angular Resolutions*, Proc. IAU Symp. #205, 15-18 August 2000 at Manchester, United Kingdom, Ed. R.T. Schilizzi, p. 408, Jan 2001
- Stanimirovic, S.**, *Statistical Investigation of HI in the SMC*, 197th AAS Meeting, San Diego, CA, January 7-11, 2001, BAAS, 32(4), p. 1502, Dec 2000
- Stanimirovic, S.**, L. Staveley-Smith, P.A. Jones, J.M. van der Hulst, Tj.R. Bontekoe, and D.J.M. Kester, *What is Cool About Cool Gas and Dust in the Small Magellanic Cloud?*, in ASP Conf. Series, Proc. of the 3rd Guillermo Haro Astrophysics Conf., Cosmic Evolution and Galaxy Formation: Structure, Interactions, and Feedback, Puebla, Mexico, Feb. 23-29, 2000, eds. J. Franco, E. Terlevich, O. Lopez-Cruz, and I. Aretxag, 215, p. 218, 2000
- Troland, T. H. and C. Heiles, *Magnetic Fields and Kinetic Temperatures in the Diffuse Interstellar Gas*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 918, May 2001

Werthimer, D., et al., *The Serendip IV Arecibo Sky Survey*, in ASP Conf. Series, Bioastronomy 99: A New Era in the Search for Life, Kohala Coast, Hawaii, 2-6 August, 1999, eds. G. Lemarchand and K. Meech, 213, p. 479, 2000

Werthimer, D., D. Anderson, C.S. Bowyer, J. Cobb, E. Heien, E.J. Korpela, M.L. Lampton, M. Lebofsky, G.W. Marcy, M. McGarry, and D. Treffers, *Berkeley Radio and Optical SETI Programs: SETI, home, SERENDIP, and SEVENDIP*, in Proc. SPIE, The Search for Extraterrestrial Intelligence (SETI) in the Optical Spectrum III, eds. S.A. Kingsley, R. Bhathal, 4273, pp. 104-109, Aug 2001

SOLAR SYSTEM STUDIES

Refereed Journals:

Benner, L.A.M., S.J. Ostro, J.D. Giorgini, R.F. Jurgens, J.L. **Margot**, and M.C. **Nolan**, 9 *KW4*, IAU Circ., ed. B.G. Marsen, 7632, p. 1, May 2001

Black, G.J., D.B. **Campbell**, and S.J. Ostro, *Icy Galilean Satellites: 70 cm Radar Results from Arecibo, Icarus*, 151(2), pp. 160-166, June 2001 [*Times Cited: 3*]

Black, G.J., D.B. **Campbell**, and P.D. Nicholson, *Icy Galilean Satellites: Modeling Radar Reflectivities as a Coherent Backscatter Effect*, *Icarus*, 151(2), pp. 167-180, June 2001 [*Times Cited: 17*]

Harmon, J.K., P.J. **Perillat**, and M.A. Slade, *High-Resolution Radar Imaging of Mercury's North Pole*, *Icarus*, 149(1), 1-15, Jan 2001

Margot, J.L., M.C. **Nolan**, L.A.M. Benner, S.J. Ostro, R.F. Jurgens, M.A. Slade, J.D. Giorgini, and D.B. **Campbell**, *Satellites of Minor Planets*, IAU Circ., ed. D.W.E. Green, 7503, p. 2, Oct 2000

Nolan, M.C., J.L. **Margot**, E.S. **Howell**, L.A.M. Benner, S.J. Ostro, R.F. Jurgens, J.D. Giorgini, and D.B. **Campbell**, 2000 *UG₁₁*, IAU Circ., ed. D. W. E. Green, 7518, p. 2, Nov 2000

Ostro, S.J., M.C. **Nolan**, J.L. **Margot**, C. Magri, A.W. Harris, and J.D. Giorgini, *Radar Observations of Asteroid 288 Glauke*, *Icarus*, 152(1), pp. 201-204, July 2001 [*Times Cited: 2*]

Ostro, S.J., R.S. Hudson, L.A.M. Benner, M.C. **Nolan**, J.D. Giorgini, D.J. Scheeres, R.F. Jurgens, and R. Rose, *Radar Observations of Asteroid 1998 ML14*, *Meteoritics & Planetary Sci.*, 36(9), pp. 1225-1236, Sept 2001 [*Times Cited: 6*]

Shepard, M.K., L.A.M. Benner, S.J. Ostro, A.W. Harris, K.D. Rosema, I.I. Shapiro, J.F. Chandler, and D.B. **Campbell**, *Radar Observations of 2100 Ra-Shalom*, *Icarus*, 147(2), pp. 520-529, Oct 2000 [*Times Cited: 3*]

Shkuratov, Y.G. and N.V. Bondarenko, *Regolith Layer Thickness Mapping of the Moon by Radar and Optical Data*, *Icarus*, 149(2), pp. 329-338, Feb 2001 [*Times Cited: 7*]

Conference Proceedings:

- Benner, L.A.M., S.J. Ostro, R.S. Hudson, and K.D. Rosema, *Radar Observations of Asteroid 3908 Nyx (1980 PA)*, 32nd DPS Meeting, Pasadena, CA, Oct 23-27, 2000, BAAS, 32(3), p. 1001, March 2001
- Black, G., D. **Campbell**, P. Nicholson, and R. Sault, *New Long-Wavelength Radio Source Occultations by Saturn's Rings*, 32nd DPS Meeting, Pasadena, CA, Oct. 23-27, 2000, BAAS, 32(3), p. 1086, 2000
- Campbell**, D.B., G.J. Black, J.L. **Margot**, M. **Nolan**, S.J. Ostro, and M. Slade, *Surface Properties of Titan from Radar Observation*, 32nd DPS Meeting, Pasadena, CA, Oct 23-27, 2000, BAAS, 32(3), p. 1023, March 2001
- Carter, L.M., D.B. **Campbell**, J.L. **Margot**, and B.A. Campbell, *Multi-Polarization Radar Imaging of Surface Features of Venus*, 33rd DPS Meeting, New Orleans, LA, Nov 27-Dec 1, 2001, BAAS, 33(3), p. 1038, March 2001
- Harcke, L.J., H.A. Zebker, R.F. Jurgens, M.A. Slade, B.J. Butler, and J.K. **Harmon**, *Planned Radar Imaging of the Galilean Satellites During 2000 Opposition*, 32nd DPS Meeting, Pasadena, CA, Oct 23-27, 2000, BAAS, 32(3), p. 1069, March 2001
- Harcke, L.J., H.A. Zebker, R.F. Jurgens, M.A. Slade, B.J. Butler, and J.K. **Harmon**, *Radar Observations of the Icy Galilean Satellites During 2000 Opposition*, 32nd Annual Lunar and Planetary Science Conf., March 12-16, 2001, Houston, Texas, abstract no.1369, March 2001
- Harcke, L.J., H.A. Zebker, G.L. Tyler, R.A. Simpson, S.J. Ostro, and J.K. **Harmon**, *Radar Imaging of Europa, Ganymede, and Callisto with the Upgraded Arecibo 13 cm Radar*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 918, May 2001
- Howell**, E.S., A.S. Rivkin, F. Vilas, and A.M. Soderberg, *Aqueous Alteration in Low Albedo Asteroids*, 32nd Annual Lunar and Planetary Science Conf., March 12-16, 2001, Houston, Texas, abstract no. 2058, March 2001
- Howell**, E.S., A.J. Lovell, and F.P. Schloerb, *Observations of the 18-cm OH lines in Comet C/1999 S4 LINEAR and Comet C/2000 T1 McNaught-Hartley*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 33(2), p. 900, May 2001
- Margot**, J.L., M.C. **Nolan**, S.J. Ostro, L.A.M. Benner, J.D. Giorgini, J.F. Chandler, and D.B. **Campbell**, *Recent Observations of Near-Earth Objects with the Arecibo Planetary Radar*, 32nd DPS Meeting, Pasadena, CA, Oct. 23-27, 2000, BAAS, 32(3), p. 1001, 2000
- Nicholson, P.D., D.B. **Campbell**, R.G. French, G.J. Black, J.L. **Margot**, and M. **Nolan**, *Radar Images of Saturn's Rings*, 32nd DPS Meeting, Pasadena, CA, Oct. 23-27, 2000, BAAS, 32(3), p. 1086, 2000
- Nolan**, M.C., J.L. **Margot**, E.S. **Howell**, A.A. Hine, A. Crespo, V. Negrón, J.D. Giorgini, and D.B. **Campbell**, *Arecibo Radar Observations of Main-Belt Asteroids in 2000*, 32nd DPS Meeting, Pasadena, CA, Oct. 23-27, 2000, BAAS, 32(3), p. 1001, 2000
- Nolan**, M.C., J.L. **Margot**, E.S. **Howell**, L.A.M. Benner, S.J. Ostro, R.F. Jurgens, J.D. Giorgini, and D.B. **Campbell**, *Radar Observations of Near-Earth Asteroids 2000 UG11 and 2000 UK11*, 32nd

Annual Lunar and Planetary Science Conf., March 12-16, 2001, Houston, Texas, abstract no. 2055

Ostro, S.J., R.S. Hudson, L.A.M. Benner, M.C. **Nolan**, J.L. **Margot**, J.D. Giorgini, R.F. Jurgens, R. Rose, and D.K. Yeomans, *Radar Observations of Asteroid 4486 Mithra*, 32nd DPS Meeting, Pasadena, CA, Oct 23-27, 2000, BAAS, 32(3), p. 1003, March 2001

Schloerb, F.P., A. Lovell, and E. **Howell**, *Radio Observations of OH in C/1999 LINEAR S4*, 32nd DPS Meeting, Pasadena, CA, Oct 23-27, 2000, BAAS, 32(3), p. 1120, March 2001

Slade, M.A., J.K. **Harmon**, R.F. Jurgens, and L.J. Härke, *Goldstone 3.5-cm Planned Radar Observations of the Mercury South Polar Region*, 32nd DPS Meeting, Pasadena, CA, Oct 23-27, 2000, BAAS, 32(3), p. 1036, March 2001

Slade, M.A., M. Simons, M.E. Pritchard, and R.F. Jurgens, *Arecibo to Goldstone Radar Interferometric Topography of Selected Regions of Venus*, 32nd Annual Lunar and Planetary Science Conf., March 12-16, 2001, Houston, Texas, abstract no. 1511, March 2001

SPACE & ATMOSPHERIC SCIENCES

Refereed Journals:

Bishop, R.L., G.D. Earle, F.A. Herrero, and T.T. Bateman, *Observations of an Intermediate Layer During the Coqui II Campaign*, J. Geophys. Res., 105(A11), pp. 24963-24972, Nov 2000 [*Times Cited: 5*]

Bust, G.S., D.S. Coco, and J.J. Makela, *Combined Ionospheric Campaign I: Ionospheric Tomography and GPS total electron count (TEC) Depletions*, Geophys. Res. Lett., 27(18), pp. 2849-2852, Sept 2000

Cheung, P.Y., M.P. **Sulzer**, D.F. DuBois, and D.A. Russell, *High-Power High-Frequency-Induced Langmuir Turbulence in the Smooth Ionosphere at Arecibo. II. Low Duty Cycle, Altitude-Resolved, Observations*, Physics of Plasmas, 8(3), pp. 802-812, March 2001 [*Times Cited: 9*]

DuBois, D.F., D.A. Russell, P.Y. Cheung, and M.P. **Sulzer**, *High-Power High-Frequency-Induced Langmuir Turbulence in the Smooth Ionosphere at Arecibo. I. Theoretical Predictions for Altitude-Resolved Plasma Line Radar Spectra*, Physics of Plasmas, 8(3), pp. 791-801, March 2001 [*Times Cited: 7*]

Earle, G.D., R.L. Bishop, S.C. Collins, S.A. **González**, and M.P. **Sulzer**, *Descending Layer Variability Over Arecibo*, J. Geophys. Res., 105(A11), pp. 24951-24962, Nov 2000 [*Times Cited: 7*]

Isham, B., C.A. **Tepley**, M.P. **Sulzer**, Q.H. **Zhou**, M.C. Kelley, J.S. **Friedman**, and S.A. **González**, *Upper Atmospheric Observations at the Arecibo Observatory: Examples Obtained Using New Capabilities*, J. Geophys. Res.-Space Physics, 105(A8), pp. 18609-18637, Aug 2000

Janches, D., D.D. Meisel, and J.D. Mathews, *Orbital Properties of the Arecibo Micro-meteoroids at Earth Interception*, Icarus, 150(2), pp. 206-218, April 2001 [*Times Cited: 14*]

- Kane, T.J., B.W. Grime, S.J. Franke, E. Kudeki, J. Urbina, M.C. Kelley, and S.C. Collins, *Joint Observations of Sodium Enhancements and Field-Aligned Irregularities*, Geophys. Res. Lett., 28(7), pp. 1375-1378, April 2001 [*Times Cited: 5*]
- Kelley, M.C. and J.J. Makela, *Resolution of the Discrepancy Between Experiment and Theory of the Midlatitude F-Region Structures*, Geophys. Res. Lett., 28(13), pp. 2589-2592, July 2001 [*Times Cited: 12*]
- Kuo, S.P., *Cascade of the Parametric Decay Instability in Ionospheric Heating Experiments*, J. Geophys. Res.-Space Phys., 106(A4), pp. 5593-5597, April 2001 [*Times Cited: 3*]
- Machuga, D.W. and J.D. Mathews, *Numerical Simulations of Three-Dimensional E-Region Ion Trajectories in Realistic Tidal Wind and E-Field Structures: Layer Formation and Transport*, J. Atmos. Solar-Terr. Phys., 63(14), pp. 1519-1528, Sept 2001 [*Times Cited: 3*]
- MacPherson, B., S.A. González, M.P. Sulzer, G.J. Bailey, F.D. Djuth, and P. Rodriguez**, *Measurements of the Topside Ionosphere Over Arecibo During the Total Solar Eclipse of February 26, 1998*, J. Geophys. Res., 105(A10), pp. 23055-23067, Oct 2000 [*Times Cited: 1*]
- Mahajan, K.K. and N.K. Sethi, *Empirical Models of Parameters B₀, B₁ from Arecibo Radar Measurements*, Adv. Space Res., 27(1), pp. 17-20, June 2001 [*Times Cited: 2*]
- Makela, J.J., S.A. **González**, B. **MacPherson**, X. Pi, M.C. Kelley, and P.J. Sultan, *Intercomparisons of Total Electron Content Measurements Using the Arecibo Incoherent Scatter Radar and GPS*, Geophys. Res. Lett., 27(18), pp. 2841-2844, Sept 2000
- Makela, J.J., M.C. Kelley, J.J. Sojka, X. Pi, and A.J. Mannucci, *GPS Normalization and Preliminary Modeling Results of Total Electron Content During a Severe Mid-Latitude Space Weather Event*, Radio Science, 36(2), pp. 351-362, March-April 2001 [*Times Cited: 4*]
- Mathews, J.D., D. Janches, D.D. Meisel, and Q.H. **Zhou**, *The Micrometeoroid Mass Flux into the Upper Atmosphere: Arecibo Results and a Comparison with Prior Estimates*, Geophys. Res. Lett., 28(10), pp. 1929-1932, May 2001 [*Times Cited: 19*]
- Mathews, J.D., D.W. Machuga, and Q.H. **Zhou**, *Evidence for Electrodynamic Linkages Between Spread-F, Ion Rain, the Intermediate Layer and Sporadic E: Results from Recent Observations and Simulations*, J. Atmos. Solar-Terr. Phys., 63(14), pp. 1529-1543, Sept 2001 [*Times Cited: 6*]
- Meléndez-Alvira, D.J., J.M. Picone, O.A. Kelley, Q. **Zhou**, and M.P. **Sulzer**, *Bimodality in the Climatological Topside Electron and Exospheric Temperature Distribution at Arecibo*, Radio Science, 36(12), pp. 311-324, March-April 2001
- Mjølhus, E., E. Helmersen, and D.F. DuBois, *Significance of Short-Scale Irregularities for Radar Diagnostics of HF-Driven Langmuir Turbulence in the Ionosphere*, J. Geophys. Res.-Space Phys., 106(A9), pp. 18525-18542, Sept 2001 [*Times Cited: 1*]
- Pandey, V.K., N.K. Sethi, and K.K. Mahajan, *Equivalent Slab Thickness and Its Variability: A Study With Incoherent Scatter Measurements*, Adv. in Space Res., 27(1), pp. 61-64, 2001
- Peria, W.J. and M.C. Kelley, *Convection Electric Field Observations Near the Arecibo HF Heater Beam*, J. Geophys. Res., 106(A9), pp. 18517-18524, Sept 2001 [*Times Cited: 1*]

- Pi, X., M. Mendillo, J. Hughes, M. Buonsanto, D. Sipler, Q. Kelly, Q. **Zhou**, G. Lu, and T. Hughes, *Dynamical Effects of Geomagnetic Storms and Substorms in the Middle-Latitude Ionosphere: an Observational Campaign*, J. Geophys. Res., 105(A4), pp. 7403-7418, 2000
- Rietveld, M.T., B. **Isham**, H. Kohl, C. La Hoz, and T. Hagfors, *Measurements of HF Enhanced Plasma and Ion Lines at EISCAT with High Altitude Resolution*, J. Geophys. Res., 105(A4), pp. 7429-7439, April 2000
- Sethi, N.K. and V.K. Pandey, *Comparative Study of Electron Density from Incoherent Scatter Measurements at Arecibo with the IRI-95 Model During Solar Maximum*, Annales Geophys., 18(12), pp. 1630-1634, Jan 2001 [*Times Cited: 2*]
- Sojka, J.J., D.C. Thompson, R.W. Schunk, T.W. Bullett, and J.J. Makela, *Assimilation Ionosphere Model: Development and Testing with Combined Ionospheric Campaign Caribbean Measurements*, Radio Science, 36, pp. 247-259, March-April 2001
- Starks, M.J., M.C. Lee, and P. Jastrzebski, *Interhemispheric Propagation of VLF Transmissions in the Presence of Ionospheric HF Heating*, J. Geophys. Res.-Space Phys., 106(A4), pp. 5579-5591, April 2001 [*Times Cited: 2*]
- Swartz, W.E., J.J. Makela, and M.C. Kelley, *First Observations of Coherent Scatter from the Mid-Latitude in the Caribbean*, Geophys. Res. Lett., 27(7), pp. 935-938, April 2000
- Swartz, W.E., M.C. Kelley, J.J. Makela, S.C. Collins, E. Kudeki, S. Franke, J. Urbina, N. **Aponte**, M.P. **Sulzer**, and S.A. **González**, *Coherent and Incoherent Scatter Observations During Intense Mid-Latitude Spread F*, Geophys. Res. Lett., 27(18), pp. 2829-2832, Sept 2000 [*Times Cited: 8*]
- Titheridge, J.E., *Production of the Low-Latitude Night E Layer*, J. Geophys. Res.-Space Phys., 106(A7), pp. 12781-12786, July 2001 [*Times Cited: 2*]
- Urbina, J., E. Kudeki, S.J. Franke, S. **González**, Q.H. **Zhou**, and S.C. Collins, *50 MHz Radar Observations of Mid-Latitude E-Region Irregularities at Camp Santiago, Puerto Rico*, Geophys. Res. Lett., 27(18), pp. 2853-2856, Sept 2000
- Walterscheid, R.L., J.H. Hecht, F.T. Djuth, and C.A. **Tepley**, *Evidence of Reflection of a Long-Period Gravity Wave in Observations of the Nightglow Over Arecibo*, J. Geophys. Res., 105(D5), pp. 6927-6934, March 2000
- Zhou**, Q.H., H. Monroy, D.C. Fritts, H.M. Ierkic, B. **Isham**, J.R. Isler, and E. Palo, *Radar Observations of Longitudinal Variability of Tidal/Planetary Waves and Mean Motions in the Tropical Mesosphere*, J. Geophys. Res., 105(D2), pp. 2151-2162 [2000]
- Zhou**, Q. H. and J.D. Mathews, *Comments on Modelling the Peak of the Ionospheric E-layer= by J.E. Titheridge*, J. Atmos. Solar-Terr. Phys., 63(6), pp. 627-629, April 2001
- Zhou**, Q.H., J.D. Mathews, and T. Nakamura, *Implications of Meteor Observations by the MU Radar*, Geophys. Res. Lett., 28(9), pp. 1399-1402, April 2001

Theses:

Janches, D., *Physical and Orbital Properties of Micrometeors Observed Using the 430 MHz Arecibo Observatory Radar*, PhD. Thesis, The Pennsylvania State University, Dec 2000

Conference Proceedings:

Choi, P.I. and A.H. Gonzalez, *Probing the HI Evolution in Intermediate Redshift Galaxy Clusters*, 198th AAS Meeting, Pasadena, CA, June 3-7, 2001, BAAS, 32(2), p. 901, May 2001

Gonzalez, S.A., M.P. Sulzer, and N. Aponte, *Temperature and Composition Measurements of the Ionosphere and Lower Plasmasphere using the Arecibo and Jicamarca ISR's*, AGU Spring Meeting 2001, abstract #SA61A-07, May 2001

Gonzalez, S.A., M.P. Sulzer, and N. Aponte, *Measuring Electron and Ion Temperatures in the Ionosphere Using Jicamarca; The Effect of Electron Coulomb Collisions on the ISR Backscatter Spectrum*, AGU Spring Meeting 2001, abstract #SA61A-09, May 2001

TECHNICAL

Love, A.W., *Radiation Patterns and Gain for a Nominal Aperture of 105 Meters in the Arecibo Spherical Reflector*, IEEE Antennas Prop., 43(1), pp. 20-30, Feb 2001 [*Times Cited: 1*]

Love, A.W., *Radiation Patterns and Gain for a Nominal Aperture of 105 Meters in the Arecibo Reflector*, IEEE Antennas Prop., 43(3), p. 48, June 2001

The following papers do not introduce new Arecibo data, but do reference published Arecibo observing results.

SPACE & ATMOSPHERIC SCIENCES

Nossal, S.M., A.T. Jacob, J.D. Buehlman, and C.H. Middlecamp, *Geocoronal Halpha Intensity Measurements Using the Wisconsin Halpha Mapper Fabry-Perot Facility*, J. Geophys. Res., 106(A4), pp. 5605-5616, April 2001 [*Times Cited: 5*]

Sasi, M.N., G. Ramkumar, and V. Deepa, *Tidal Wind Oscillations in the Tropical Lower Atmosphere as Observed by Indian MST Radar*, Annales Geophysicae, 19(8), pp.991-999, Aug 2001

NAIC/ARECIBO OBSERVATORY PUBLICATIONS

October 2001 – September 2002

This list of publications includes papers that result from NAIC support as well as from AO data.

**Bolded names are individuals who are currently scientific staff members, or were at the time of publication submission.*

RADIO ASTRONOMY

Refereed Journals & Books:

Altschuler, D.R., Hijos de las Estrellas: Nuestro Origen, Evolución y Futuro, Cambridge University Press, 2001

Altschuler, D.R., Children of the Stars : Our Origin, Evolution and Destiny, Cambridge, UK: Cambridge University Press, 2002

Araya, E., P. Hofner, E. Churchwell, and S. Kurtz, *Arecibo Observations of Formaldehyde and Radio Recombination Lines toward Ultracompact H II Regions*, *Astrophys. J. Supp. Ser.*, 138(1), pp. 63-74, Jan 2002 [*Times Cited: 19*]

Bhat, N.D.R. and Y. **Gupta**, *Pulsar Scintillation in the Local ISM: Loop I and Beyond*, *Astrophys. J.*, 567(1), pp. 342-353, March 2002

Bhat, N.D.R., F. Camilo, J.M. Cordes, D.J. Nice, D.R. Lorimer, and S. Chatterjee, *Arecibo Observations of Parkes Multibeam Pulsars*, *J. Astrophys. & Astron.*, 23(1-2), pp. 53-57, March-June 2002

Burkholder, V., C. Impey, and D. Sprayberry, *High and Low Surface Brightness Galaxies in the Local Universe. V. Optical and HI Properties*, *Astron. J.*, 122(5), pp. 2318-2340, Nov 2001

Cabanela, J.E. and J.M. Dickey, *Galaxies on the Blue Edge*, *Astron. J.*, 124(1), pp. 78-99, July 2002 [*Times Cited: 3*]

Camilo, F., D.R. Lorimer, N.D.R. Bhat, E.V. Gotthelf, J.P. Halpern, Q.D. Wang, F.J. Lu, and N. Mirabal, *Discovery of a 136 Millisecond Radio and X-ray Pulsar in Supernova Remnant G54.1+0.3*, *Astrophys. J. Lett.*, 574(1), pp. L71-L74, July 2002 [*Times Cited: 2*]

Chung, A., J.H. van Gorkom, K. **O'Neil**, and G.D. Bothun, *Low Surface Brightness Galaxies and the Tully-Fisher Relation*, *Astron. J.*, 123(5), pp. 2387-2401, May 2002 [*Times Cited: 13*]

Darling, J. and R. Giovanelli, *The Discovery of Time Variability in OH Megamasers*, *Astrophys. J. Lett.*, 569(2), pp. L87-L90, April 2002

Darling, J. and R. Giovanelli, *A Search for OH Megamasers at $Z > 0.1$. III. The Complete Survey*, *Astron. J.*, 124(1), pp. 100-126, July 2002 [*Times Cited: 13*]

Darling, J. and R. Giovanelli, *The OH Megamaser Luminosity Function*, *Astrophys. J.*, 572(2), pp. 810-822, June 2002 [*Times Cited: 8*]

Dickey, J.M., N.M. McClure-Griffiths, S. **Stanimirovic**, B.M. Gaensler, and A.J. Green, *Southern Galactic Plane Survey Measurements of the Spatial Power Spectrum of Interstellar HI in the Inner Galaxy*, *Astrophys. J.*, 561(1), pp. 264-271, Nov 2001

- Giovanelli, R. and M.P. Haynes, *The Inner Scale Length of Spiral Galaxy Rotation Curves*, *Astrophys. J.*, 571(2), pp. L107-L111, June 2002
- Goldsmith**, P.F., D. Li, E.A. Bergin, G.J. Melnick, V. Tolls, J.E. Howe, R.L. Snell, and D.A. Neufeld, *Tentative Detection of Molecular Oxygen in the Rho Ophiuchi Cloud*, *Astrophys. J.*, 576(2), pp. 814-831, Sept 2002
- Hoffman, G.L., E.E. Salpeter and N.J. Carle, *The Fine Structure and Outskirts of DDO 154*, *Astron. J.*, 122(5), pp. 2428-2443, Nov 2001 [*Times Cited: 3*]
- Hoffman, G.L., E.E. Salpeter, and M.G. Poceschi, *High Velocity Cloud Edges and Mini-High-Velocity Clouds*, *Astrophys. J.*, 576(1), pp. 232-240, Sept 2002 [*Times Cited: 3*]
- Impey, C., V. Burkholder and D. Sprayberry, *High and Low Surface Brightness in the Local Universe. IV. Optical and 21 Centimeter Spectroscopy*, *Astron. J.*, 122(5), pp. 2341-2380, Nov 2001
- Kalenskii, S.V., V.I. **Slysh**, and I.E. Val'tts, *Thermal Emission of Methanol and Other Molecules at Millimeter Wavelengths*, *Astronomy Reports*, 46(2), pp. 96-109, Feb 2002
- Karastergiou, A., A. von Hoensbroech, M. Kramer, D.R. Lorimer, A.G. Lyne, O. Doroshenko, A. Jessner, C. Jordan, and R. Wielebinski, *Simultaneous Single-Pulse Observations of Radio Pulsars. I. The Polarization Characteristics of PSR B0329+54*, *Astron. Astrophys.*, 379, pp. 270-278, Nov 2001
- Karastergiou, A., M. Kramer, M., S. Johnston, A.G. Lyne, N.D.R. Bhat, and Y. **Gupta**, *Simultaneous Single-Pulse Observations of Radio Pulsars: II. Orthogonal Polarization Modes in PSR B1133+16*, *Astron. Astrophys.*, 391, pp. 247-251, Aug 2002
- Lewis**, B.M., *On the Transience of High-Latitude OH/IR Stars: II The Thermal Pulse Link*, *Astrophys. J.*, 560(1), pp. 400-412, Oct 2001
- Lewis**, B.M., *On Dead OH/IR Stars*, *Astrophys. J.*, 576(1), pp. 445-449, Sept 2002 [*Times Cited: 4*]
- Lommen, A.N. and D.C. Backer, *Using Pulsars to Detect Massive Black Hole Binaries Via Gravitational Radiation: Sagittarius A* and Nearby Galaxies*, *Astrophys. J.*, 562(1), pp. 297-302, Nov 2001
- Lorimer, D.R., F. Camilo, and K.M. Xilouris, *Arecibo Timing Observations of 17 Pulsars Along the Galactic Plane*, *Astron. J.*, 123(3), pp. 1750-1756, March 2002 [*Times Cited: 5*]
- Mantovani, F., W. Junor, R. Ricci, D.J. Saikia, C. **Salter**, and M. Bondi, *Milli-arcsecond Scale Rotation Measure in the CSS Quasars 0548 + 165 and 1524-136*, *Astron. Astrophys.*, 389, pp. 58-67, July 2002
- Mantovani, F., D.J. Saikia, M. Bondi, W. Junor, C.J. **Salter**, and R. Ricci, *B 1524-136: A. CSS Quasar with Two-Sided Radio Jets*, *Astron. Astrophys.*, 389, pp. L15-L19, July 2002
- McLaughlin, M.A., Z. Arzoumanian, J.M. Cordes, D.C. Backer, A.N. Lommen, D.R. Lorimer, and A.F. Zepka, *PSR J1740+1000: A Young Pulsar Well Out of the Galactic Plane*, *Astrophys. J.*, 564(1), pp. 333-342, Jan 2002 [*Times Cited: 2*]

- Mitra, D. and J.M. Rankin, *Toward an Empirical Theory of Pulsar Emission. VII. On the Spectral Behavior of Conal Beam Radii and Emission Heights*, *Astrophys. J.*, 577(1), pp. 322-336, Sept 2002
- Monnier-Ragaigne, D., W. van Driel, C. Balkowski, S.E. Schneider, T.H. Jarrett, and K. O'Neil, *Study of 2MASS Low Surface Brightness Galaxies*, *Astrophys. & Space Sci.*, 281(1), pp. 145-146, 2002
- Roberts, M.S.E., J.W.T. Hessels, S.M. Ransom, V.M. Kaspi, P.C.C. Freire, F. Crawford, and D.R. Lorimer, *PSR J2021+3651: A Young Radio Pulsar Coincident with an Unidentified EGRET Gamma-Ray Source*, *Astrophys. J. Lett.*, 577(1), L19-L22, Sept 2002 [*Times Cited: 10*]
- Rosenberg, J.L. and S.E. Schneider, *The Arecibo Dual-Beam Survey: The HI Mass Function of Galaxies*, *Astrophys. J.*, 567(1), pp. 247-257, March 2002 [*Times Cited: 26*]
- Saikia, D.J., P. Thomasson, R.E. Spencer, F. Mantovani, C.J. Salter, and S. Jeyakumar, *CSSs in a Sample of B2 Radio Sources of Intermediate Strength*, *Astron. Astrophys.*, 391, pp. 149-157, Aug 2002
- Salzer, J.J., J.L. Rosenberg, E.W. Weisstein, J.M. Mazzarella, and G.D. Bothun, *An HI Survey of Actively Star-forming Dwarf Galaxies*, *Astron. J.*, 124(1), pp. 191-212, July 2002 [*Times Cited: 5*]
- Slysh, V.I., S.V. Kalenskii, and I.E. Val'Tts, *Methanol Radio Emission at Millimeter Wavelengths: New Masers at 1.3 and 2.8 Millimeters*, *Astronomy Reports*, 46(1), pp. 49-56, Jan 2002
- Slysh, V.I., V. Migenes, I.E. Val'tts, S.Y. Lyubchenko, S. Horiuchi, V.I. Altunin, E.B. Fomalont, and M. Inoue, *Total Linear Polarization in the OH Maser W75 N: VLBA Polarization Structure*, *Astrophys. J.*, 564(1), pp. 317-326, Jan 2002
- Slysh, V.I., I.E. Val'Tts, V. Migenes, *A Magnetized Disk Around O Star: Polarization of the OH Maser Emission*, *Astronomy Reports*, 46(3), pp. 216-223, March 2002
- Stanimirovic, S., J.M. Dickey, M. Krco, and A.M. Brooks, *The Small-Scale Structure of the Magellanic Stream*, *Astrophys. J.*, 576(2), pp. 773-789, Sept 2002 [*Times Cited: 9*]
- J.C. Tarter, J.W. Dreher, S.W. Ellingson, and W.J. Welch, *Recent Progress and Current Activities in the Search for Extraterrestrial Intelligence (SETI)*, *Review of Radio Science 1999-2002*, W. Ross Stone, ed., IEEE Press, Wiley & Sons, Inc. Piscataway, NJ, Chapter 36, pp. 901-931, 2002
- Weisberg, J.M. and J.H. Taylor, *General Relativistic Geodetic Spin Precession in Binary Pulsar B1913+16: Mapping the Emission Beam in Two Dimensions*, *Astrophys. J.*, 576(2), pp. 942-949, Sept 2002

Thesis:

- Lommen, A.N., *Precision Multi-Telescope Timing of Millisecond Pulsars: New Limits on the Gravitational Wave Background and Other Results from the Pulsar Timing Array*, PhD Thesis, UC Berkeley, Dec 2001

Conference Proceedings:

- Araya, E., P. Hofner, E., E. Churchwell, and S. Kurtz, *Arecibo Observations of Formaldehyde and Radio Recombination Lines Toward Ultracompact HII Regions*, 199th AAS Meeting, Washington, DC, January 6-19, 2002, #124.02, Dec 2001
- Bhat**, N.D.R., Y. Gupta, A.P. Rao, and P.B. Preethi, P.B., *Interstellar Scintillation Studies of Pulsars and Distribution of Scattering Plasma in the Local Interstellar Medium*, in A&SS, Kluwer Academic Publ., Proc. of IAU Coll. 182: Sources and Scintillations: Refraction and Scattering in Radio Astronomy, Guiyang, China, April 17-21, 2001, Eds. R. Strom, P. Bo, M. Walker & N. Rendong
- Cabrera, I.M., C.A. Pantoja, and J. Eder, *Infrared and Optical Images of Spiral Galaxies at Low Galactic Latitudes*, 199th AAS Meeting, Washington, DC, January 6-19, 2002, #52.15, Dec 2001
- Coles, W.A., *Prospects for a Solar Radar at Arecibo*, 200th AAS Meeting 200, Albuquerque, NM, June 3-6, 2002, #49.09, May 2002
- Cordes, J.M., *Neutron Star Populations at the Millennium*, in Pulsar Astronomy - 2000 and Beyond, ASP Conference Series, Proc. of the 177th IAU Colloq., held in Bonn, Germany, 30 Aug-3 Sep. 1999, (San Francisco: ASP), eds. M. Kramer, N. Wex, and N. Wielebinski, 202, p. 573, 2002
- Darling, J., *The Arecibo OH Megamaser Survey*, 199th AAS Meeting, Washington, DC, January 6-19, 2002, #35.05, Dec 2001
- Eder, J. and K. O'Neil, *21 cm Spectroscopy with the Upgraded Arecibo Telescope*, in ASP Conf. Series, Gas & Galaxy Evolution, Socorro, NM, May 21-24, 2000, eds. L.E. Hibbard, M.P. Rupen, and J.H. van Gorkom, 240, p. 462, 2001
- Freire**, P.C., F.C. Camilo, M. Kramer, D.R. Lorimer, A.G. Lyne, R.M. Manchester, N. D'Amico, *On Very Low-Mass Binary Pulsars*, 199th AAS Meeting, #159.04, Dec 2001
- Ghosh**, T., J. Eder, C.J. **Salter**, and D.M. Frierson, *Neutral Hydrogen in Seyfert Galaxies - A Test for the Unification Scheme*, ASP Conf. Series, Gas and Galaxy Evolution, eds. J.E. Hibbard, M. Rupen, and J.H. van Gorkom, 240, p. 414, 2001
- Ghosh**, T., M. Aller, C.J. **Salter**, and M.M. **Davis**, *A Neutral Hydrogen Search for the Host Galaxies of 18 Radio-Loud Quasars*, ASP Conf. Series, Proc. of IAU Symp. 199: The Universe at Low Radio Frequencies, Pune, India, Nov. 30 - Dec. 4, 1999, Eds. A. Pramesh Rao, G. Swarup & Gopal-Krisna
- Gupta, Y., P. Gothoskar, and N.D.R. **Bhat**, *First Results from Simultaneous Dual Frequency Observations of Pulsars*, ASP Conf. Ser., Proc. of IAU Symp. 199: The Universe at Low Radio Frequencies, Pune, India, Nov. 30 - Dec. 4, 1999, Eds. A. Pramesh Rao, G. Swarup & Gopal-Krisna
- Heiles, C., *Cross-Correlation Spectropolarimetry in Single-Dish Radio Astronomy*, PASP, 113, pp. 1243-1246, Oct 2001
- Heiles, C., P. **Perillat**, M. **Nolan**, D. **Lorimer**, R. **Bhat**, T. **Ghosh**, E. **Howell**, M. **Lewis**, K. **O'Neil**, C. **Salter**, and S. **Stanimirovic**, *All-Stokes Parameterization of the Main Beam and First Sidelobe for the Arecibo Radio Telescope*, PASP, 113(788), pp. 1247-1273, Oct 2001 [*Times Cited: 11*]

- Heiles, C., P. Perillat, M. Nolan, D. Lorimer, R. Bhat, T. Ghosh, E. Howell, M. Lewis, K. O'Neil, C. Salter, and S. Stanimirovic, *Mueller Matrix Parameters for Radio Telescopes and Their Observational Determination*, PASP, 113(788), pp. 1274-1288, Oct 2001 [*Times Cited: 7*]
- Hessels, J.W.T., S.M. Ransom, I.H. Stairs, and V.M. Kaspi, *A 20cm Search for Pulsars in Globular Clusters*, 199th AAS Meeting, Washington, DC, January 6-19, 2002, #17.06, Dec 2001
- Jenet, F.A., S.B. Anderson, and T.A. Prince, *High Time Resolution Observations of Radio Pulsars and the First Detection of Non-Gaussian Coherent Emission*, 199th AAS Meeting, Washington, DC, January 6-19, 2002, #159.01, Dec 2001
- Jiménez-Esteban, F., D. Engels, and P. García-Lario, *Near IR Observations of the Arecibo Sample of OH/IR Stars*, in Proc. of the Torun Workshop, Post-AGB Objects as a Phase of Stellar Evolution, Torun, Poland, July 5-7, 2000, eds. R. Szczerba and S.K. Górný, eds., Astrophys. & Space Sci. Library, 265, 2001
- Kaplan, D.L., J.M. Cordes, and J.J. Condon, *The Steep Spectrum Pulsar Population*, in Pulsar Astronomy - 2000 and Beyond, ASP Conference Series, Proc. of the 177th IAU Colloq., held in Bonn, Germany, 30 Aug-3 Sep 1999, (San Francisco: ASP), eds. M. Kramer, N. Wex, and N. Wielebinski, 202, p. 35, 2002
- Kirchner, A. and N.D.R. Bhat, *Wisp-like Features in Secondary Spectra of Pulsar Scintillation*, 197th AAS Meeting, San Diego, CA, Jan 7-11, 2001, BAAS, 32(4), p. 1484, 2001
- Konacki, M. and A. Wolszczan, *Earth-size Planets in the PSR B1257+12 Planetary System*, 202nd AAS Meeting, #55.03, May 2003
- Lewis, B.M., *IRAS 18455+0448: The Birth & Death of OH/IR Stars*, in Proc. of Torun Workshop, APost-AGB Objects as a Phase of Stellar Evolution, Torun, Poland, July 5-7, 2000, eds. S. Szczerba and S. Gornay (Kluwer Academic Publishers), 265, p. 423, 2001
- Lewis, B.M., *Changes in the OH Emission of the Hypergiant Star IRAS 19566+3423*, in ASP Conf. Series AEta Carinae and Other Mysterious Stars: The Hidden Opportunities of Emission-Line Spectroscopy, Hven, Sweden, Aug 24-26, 2000, eds. T. Gull, S. Johansson, and K. Davidson, 242, p. 167, 2001
- Lewis, B.M., *Observational Evidence for an Abrupt Decrease in the Mass-Loss Rate of FV Boo*, 201st AAS Meeting, #25.06, Dec 2002
- Lommen, A.N. and D.C. Backer, *New Limits on the Gravitational Wave Background and Other Results from the Pulsar Timing Array*, 199th AAS Meeting, Washington, DC, January 6-19, 2002, #24.03, Dec 2001
- Lommen, A.N., *New Limits on Gravitational Radiation Using Pulsars*, to appear in the Proceedings of the 270. WE-Heraeus Seminar on Neutron Stars, Pulsars and Supernova Remnants, Jan. 21-25, 2002, Physikzentrum Bad Honnef, eds. W. Becker, H. Lesch & J. Tremper. MPE-Report 278, Aug 2002
- Lorimer, D.R., *Radio Pulsars - An Observer's Perspective*, in Proc. of the NATO Advanced Study Institute, "The Neutron Star - Black Hole Connection, Elounda, Crete, Greece, 7-18 June 1999,

- eds. C. Louveliotou, J. Ventura, and E. van den Heuvel (Kluwer Publishing), 567, pp. 3-19, Dec 2001
- Lorimer, D.R.**, *Neutron Star Birth Rates*, in Proc. of the NATO Advanced Study Institute, The Neutron Star - Black Hole Connection, Elounda, Crete, Greece, 7-18 June 1999 eds. C. Louveliotou, J. Ventura, and E. van den Heuvel (Kluwer Publishing), 567, pp. 21-40, Dec 2001
- Lorimer, D.R., M.A. McLaughlin, K.M. Xilouris, D.C. Backer, J.M. Cordes, Z. Arzoumanian, A.S. Fruchter, and A. Lommen, *An Arecibo Drift-Scan Search for Rapidly Rotating Radio Pulsars*, 200th AAS Meeting, Albuquerque, NM, June 3-6, 2002, #94.01, June 2002
- Lovell, A.J., E.S. **Howell**, and F.P. Schloerb, *Spectral Line Mapping Observations of 18-cm OH Lines in Comets*, American Astronomical Society, DPS meeting #34, #16.08, Sept 2002
- Momjian, E., J.D. Romney, C.L. Carilli, and T.H. Troland, *VLBI Continuum and HI Absorption Observations of NGC7674*, 200th AAS Meeting, Albuquerque, NM, June 3-6, 2002, #45.10, May 2002
- Nice, D.J., Z. Arzoumanian, and S.E. Thorsett, *Eclipsing Binary Millisecond Pulsars: Observations of Orbit and Pulse Phase Variability*, 199th AAS Meeting, Washington, DC, Jan 6-19, 2002, #06.14, Dec 2001
- Pantoja, C.A., A. Ruiz, and F. Cruz, *Optical and IR Observations of IRAS 02290+2533, an Interacting System of Galaxies*, 199th AAS Meeting, Washington, DC, Jan 6-19, 2002, #43.02, Dec 2001
- Slysh, V.**, *Maser Emission from Icy Planets Orbiting Young Stars*, in Proc. of IAU Colloq. 187, Exotic Stars as Challenges to Evolution, Miami Beach, Florida, March 4-8, 2002, p. 273, 2002
- Slysh, V.I.**, M.A. Voronkov, F. Palagi, and G. Tofani, *EVN Observations of 6.7 GHz Methanol Masers from Medicina Survey*, in Proc. of 6th EVN Symposium, Bonn, Germany, June 25-28, 2002, p. 213, 2002
- Slysh, V.I.**, I.E. Val'ts, M.A. Voronkov, and V. Migenes, *A Protoplanetary Disk in V645 Cyg as Seen with H₂O and Methanol Masers*, in Proc. of IAU Colloq. 187, Exotic Stars as Challenges to Evolution, Miami Beach, Florida, March 4-8, 2002, p. 279, 2002
- Stairs, I.H., S.E. Thorsett, and J.H. Taylor, *Timing Observations of PSR B1534+12*, 199th AAS Meeting, Washington, DC, Jan 6-19, 2002, #17.05, Dec 2001
- Stairs, I.H., S.E. Thorsett, J.H. Taylor, and Z. Arzoumanian, *Recent Observations of PSR B1534+12*, in Proc. of IAU Symp. 205 - Galaxies and Their Constituents at the Highest Angular Resolutions, Manchester, England, August 2000, eds. R.T. Schilizzi, S. N. Vogel, F. Paresce, and M.S. Elvis, p. 152, 2001
- Stanimirovic, S.**, J.M. Dickey, A.M. Brooks, and A.S. Hedden, *The Small-Scale Structure of the Magellanic Stream*, in Proc. of the XVIIth IAP Colloquium: Gaseous Matter in Galaxies and Intergalactic Space, p. 1999, 2001
- Val'Ts, I.E., V.I. **Slysh**, M.A. Voronkov, and V. Migenes, *A Protoplanetary Disk in V645 Cyg As Seen with H₂O and Methanol Masers*, Exotic Stars as Challenges to Evolution, ASP Conference Proc.,

Vol. 279. Also IAU Colloquium 187. Eds. C.A. Tout and W. Van Hamme. ISBN: 1-58381-122-2. San Francisco: Astron. Soc. of the Pacific, p. 279, 2002

Xilouris, K.M., A. Fruchter, D.R. **Lorimer**, J. Eder, and A. **Vazquez**, *Slow Pulsars from the STScI/NAIC Drift Scan Search*, Pulsar Astronomy - 2000 and Beyond, ASP Conference Series, Proc. of the 177th IAU Colloq., held in Bonn, Germany, 30 Aug - 3 Sep 1999, (San Francisco: ASP), eds. M. Kramer, N. Wex, and N. Wielebinski, 202, p. 21, 2002

SOLAR SYSTEM STUDIES

Refereed Journals:

Benner, L.A.M., S.J. Ostro, M.C. **Nolan**, J.L. Margot, J.D. Giorgini, R.S. Hudson, R.F. Jurgens, M.A. Slade, E.S. **Howell**, D.B. **Campbell**, and D.K. Yeomans, *Radar Observations of Asteroid 1999 JM8*, Meteoritics & Planetary Sci., 37(6), pp. 779-792, June 2002 [*Times Cited: 4*]

Benner, L.A.M., S.J. Ostro, R.S. Hudson, K.D. Rosema, R.F. Jurgens, D.K. Yeomans, D.B. Campbell, J.F. Chandler, and I.I. Shapiro, *Radar Observations of Asteroid 3908 Nyx*, Icarus, 158, pp. 379-388, Aug 2002 [*Times Cited: 3*]

Black, G., D. **Campbell**, L. Carter, and S. Ostro, *Saturn VIII (Iapetus)*, IAU Circ., D.W.E. Green, ed., 7794, p. 2, Jan 2002

Campbell, D.B., R.S. Hudson, and J.L. Margot, *Advances in Planetary Radar Astronomy*, Review of Radio Science 1999-2002, W.R. Stone, ed., John Wiley & Sons, publishers, Chapter 35, pp. 869-899, Aug 2002

Giorgini, J.D., S.J. Ostro, L.A.M. Benner, P.W. Chodas, S.R. Chesley, R.S. Hudson, M.C. **Nolan**, A.R. Klemola, E.M. Standish, R.F. Jurgens, R. Rose, A.B. Chamberlin, D.K. Yeomans, and J.L. Margot, *Asteroid 1950 DA's Encounter with Earth in 2880: Physical Limits of Collision Probability Prediction*, Science, 296, pp. 132-136, April 2002 [*Times Cited: 10*]

Magri, C., G.J. Consolmagno, and S.J. Ostro, *Radar Constraints on Asteroid Regolith Compositions Using 433 Eros as Ground Truth*, Meteoritics & Planetary Science, 36(12), pp. 1697-1709, Dec 2001 [*Times Cited: 7*]

Mahapatra, P.R., L.A.M. Benner, S.J. Ostro, R.F. Jurgens, J.D. Giorgini, D.K. Yeomans, J.F. Chandler, and I.I. Shapiro, *Radar Observations of Asteroid 7335 (1989JA)*, Planetary & Space Sci., 50(3), pp. 257-260, March 2002

Margot, J.L., M.C. **Nolan**, L.A.M. Benner, S.J. Ostro, R.F. Jurgens, J.D. Giorgini, M.A. Slade, and D.B. **Campbell**, *Binary Asteroids in the Near-Earth Object Population*, Science, 296, pp. 1445-1448, May 2002

Nolan, M.C., E.S. **Howell**, C. Magri, B. Beeney, D.B. **Campbell**, L.A.M. Benner, S.J. Ostro, J.D. Giorgini, and J.L. Margot, *2002 BM₂₆*, IAU Circ., D.W.E. Green, ed., 7824, p. 1, Feb 2002

Nolan, M.C., E.S. **Howell**, S.J. Ostro, L.A.M. Benner, J.D. Giorgini, J.L. Margot, and D.B. **Campbell**, *2002 KK₈*, IAU Circ., D.W.E. Green, ed., 7921, p. 3, June 2002

Nozette, S., P.D. Spudis, M.S. Robinson, D.B.J. Bussey, C. Lichtenberg, and R. Bonner, *Integration Of Lunar Polar Remote-Sensing Data Sets: Evidence For Ice At The Lunar South Pole*, J. Geophys. Res.-Planets, 106(E10), pp. 23253-23266, Oct 2001 [*Times Cited: 9*]

Ostro, S.J., K.D. Rosema, D.B. **Campbell**, and I.I. Shapiro, *Radar Observations of Asteroid 1862 Apollo*, Icarus, 156(2), pp. 580-583, April 2002 [*Times Cited: 2*]

Conference Proceedings:

Black, G. J., D.B. **Campbell**, and J.K. **Harmon**, *New 70-cm Wavelength Radar Images of Mercury's North Polar Region*, 33rd Annual Lunar and Planetary Science Conference, March 11-15, 2002, Houston, Texas, abstract no.1946, March 2002

Black, G.J., D.B. **Campbell**, L.M. Carter, and S.J. Ostro, *Radar Detection of Iapetus*, American Astronomical Society, DPS meeting #34, #23.06, Sept 2002

Campbell, D.B., G.J. Black, L.M. Carter, and S.J. Ostro, *The Surface of Titan: Arecibo Radar Observations in 2001*, American Astronomical Society, DPS meeting #34, #22.04, Sept 2002

Giorgini, J.D., S.J. Ostro, L.A.M. Benner, P.W. Chodas, S.R. Chesley, R.S. Hudson, M.C. **Nolan**, A.R. Klemola, E.M. Standish, R.F. Jurgens, R. Rose, A.B. Chamberlin, D.K. Yeomans, and J.L. Margot, *Asteroid 1950 DA's Encounter with Earth in 2880: Physical Limits of Collision Probability Prediction*, American Astronomical Society, DDA meeting #33, #02.02, Sept 2002

Harcke, L.J., B.J. Butler, H.A. Zebker, M.A. Slade, and R.F. Jurgens, *Unambiguous 3.5 cm Reflectivity Images of Ganymede and Callisto From Bistatic Goldstone/VLA Radar Observations*, AGU Fall Meeting, San Francisco, CA, Dec. 10-14, 2001, abstract #P12B-0498

Harmon, J. K. and D.B. **Campbell**, *Mercury Radar Imaging at Arecibo in 2001*, 33rd Annual Lunar and Planetary Science Conference, March 11-15, 2002, Houston, Texas, abstract no.1858, March 2002

Jurgens, R.F., J.L. Margot, M. Simons, M.E. Pritchard, and M.A. Slade, *Geological Interpretations of the Topography of Selected Regions of Venus from Arecibo to Goldstone Radar Interferometry*, 33rd Annual Lunar and Planetary Science Conf., March 11-15, 2002, Houston, Texas, abstract no. 1430, March 2002

Magri, C., G.J. Consolmagno, S.J. Ostro, L.A.M. Benner, and B.R. Beene, *Radar Constraints On Asteroid Regolith Compositions Using 433 Eros As Ground Truth*, Meteoritics & Planetary Sci., 36(12), pp. 1697-1709, Dec 2001 [*Times Cited: 7*]

Nicholson, P.D., D.B. **Campbell**, R.G. French, J.L. Margot, G.J. Black, and M. **Nolan**, *Radar Imaging of Saturn's Rings*, American Astronomical Society, DPS meeting #34, #24.04, Sept 2002

Nolan, M.C., E.S. **Howell**, J.K. **Harmon**, D.B. **Campbell**, J.L. Margot, and J.D. Giorgini, *Arecibo Radar Observations of C/2001A2(B) (LINEAR)*, 33rd DPS Meeting, New Orleans, LA, Nov 27-Dec 1, 2001, BAAS, 33(3), pp. 1120-1121, Dec 2001

Ostro, S. J., L.A.M. Benner, J.D. Giorgini, C. Magri, C., J.L. Margot, and M.C. **Nolan**, *Asteroid Radar Astronomy at the Dawn of the New Millennium*, 33rd Annual Lunar and Planetary Science Conf., March 11-15, 2002, Houston, Texas, abstract no. 1715, March 2002

Rivkin, A.S., R.P. Binzel, E.S. **Howell**, S.J. Bus, and J.A. Grier, *Spectroscopy and Classification of Mars Trojan Asteroids*, American Astronomical Society, DPS Meeting #34, #04.05, Sept 2002

Slade, M.A., L.J. Harcke, R.F. Jurgens, and H.A. Zebker, *Mercury's North & South Polar Regions: Goldstone Radar Imaging at 3.5-cm Wavelength*, 33rd DPS Meeting, New Orleans, LA, Nov 27-Dec 1, 2001, #04.01, Nov 2001

SPACE & ATMOSPHERIC SCIENCES

Refereed Journals:

Aponte, N., M.P. **Sulzer**, and S.A. **González**, *Correction of the Jicamarca Electron-Ion Temperature Ratio Problem: Verifying the Effect of Electron Coulomb Collisions on the Incoherent Scatter Spectrum*, J. Geophys. Res., 106(A11), pp. 24785-24794, Nov 2001

Bishop, R.L., G.D. Earle, S.A. **González**, M.P. **Sulzer**, and S.C. Collins, *Inferred Vertical Ion Velocities Associated With Intermediate Layers*, J. Atmos. Solar-Terr. Phys., 64(12-14), pp. 1471-1477, Aug 2002

Boyer, E., M. Petitdidier, W. Corneil, C. Adnet, and P. Larzabal, *Application of Model-Based Spectral Analysis to Wind-Profiler Radar Observations*, Annales Geophys., 19(8), pp. 815-824, Aug 2001

Cheung, P.Y., M.P. **Sulzer**, D.F. Dubois, and D.A. Russell, *High-Power High-Frequency-Induced Langmuir Turbulence in the Smooth Ionosphere at Arecibo. II. Low Duty Cycle, Altitude-Resolved Observation*, Phys. Plasmas, 8(3), pp. 802-812, 2001

Collins, S.C., J.M.C. Plane, M.C. Kelley, T.G. Wright, P. Soldán, T.J. Kane, A.J. Gerrard, B.W. Grime, R.J. Rollason, J.S. **Friedman**, S.A. **González**, Q. **Zhou**, M.P. **Sulzer**, and C.A. **Tepley**, *A Study of The Role of Ion-Molecule Chemistry in the Formation of Sporadic Sodium Layers*, J. Atmos. Solar-Terr. Phys., 64(7), pp. 845-860, June 2002 [*Times Cited: 15*]

Dubois, D.F., D.A. Russell, Cheung, P.Y., and M.P. **Sulzer**, *High-Power High-Frequency-Induced Langmuir Turbulence in the Smooth Ionosphere at Arecibo. I. Theoretical Predictions for Altitude-Resolved Plasma Line Radar Spectra*, Phys. Plasmas, 8(3), pp. 791-801, 2001

Friedman, J.S., S.C. Collins, R. Delgado, and P.A. Castleberg, *Mesospheric Potassium Layer Over the Arecibo Observatory, 18.3EN 66.75EW*, Geophys. Res. Lett., 29(5), pp. 15-1, CiteID 1072, March 2002 [*Times Cited: 3*]

Gelinas, L.J., M.C. Kelley, and M.F. Larsen, *Auroral Emission Generated by a Trimethyl Aluminum Release*, J. Geophys. Res., 106(A10), pp. 21495-21502, Oct 2001

Hickey, M.P., *Reflection of a Long-Period Gravity Wave Observed in the Nightglow Over Arecibo on May 8-9, 1989?*, J. Geophys. Res., 106(D22), pp. 28199-28208, 2001 [*Times Cited: 1*]

- Isham, B., C.A. **Tepley**, M.P. **Sulzer**, Q.H. **Zhou**, M.C. Kelley, J.S. **Friedman**, and S.A. **González**, *Upper Atmospheric Observations at the Arecibo Observatory: Examples Obtained Using New Capabilities*, J. Geophys. Res., 105(A8), pp. 18609-18638, 2001
- Istomin, Y.N. and T.B. Leyser, *Diffraction of Electromagnetic Waves by Small Scale Geomagnetic Field-Aligned Density Striations*, Physics of Plasmas, 8(10), pp. 4577-4584, Oct 2001 [*Times Cited: 3*]
- Istomin, Y.N., *The Ponderomotive Action of a Powerful Electromagnetic Wave on Ionospheric Plasma*, Physics Lett., A299 (2-3), pp. 248-257, July 2002
- Kamalabadi, F., G. Bust, K. Dymond, S. **González**, P. Bernhardt, S. Chakrabarti, D. Cotton, A. Stephan, R. McCoy, S. Budzien, and S. Thonnard, *Tomographic Studies Of Aeronomic Phenomena Using Radio And UV Techniques*, J. Atmos. Solar-Terr. Phys., 64(12-14), pp. 1573-1580, Aug-Sep 2002
- Kelley, M.C., J.J. Makela, and A. Saito, *The Mid-Latitude /F Region at the Mesoscale: Some Progress at Last*, J. Atmos. Solar-Terr. Phys., 64(12-14), pp. 1525-1529, Aug-Sep 2002 [*Times Cited: 4*]
- Kerr, R., R. **Garcia**, X. He, J. Noto, R.S. Lancaster, C.A. **Tepley**, S.A. **González**, J. **Friedman**, R.A. Doe, M. Lappen, and B. McCormack, *Periodic Variations of Geocornal Balmer-Alpha Brightness Due to Solar-Driven Exospheric Abundance Variations*, J. Geophys. Res., 106(A12), pp. 28797-28818, Dec 2001a [*Times Cited: 3*]
- Kerr, R., R. **Garcia**, X. He, J. Noto, R.S. Lancaster, C.A. **Tepley**, S.A. **González**, J. **Friedman**, R.A. Doe, M. Lappen, and B. McCormack, *Secular Variability of the Geocornal Balmer-Alpha Brightness: Magnetic Activity and Possible Human Influences*, J. Geophys. Res., 106(A12), pp. 28819-28830, Dec 2001b [*Times Cited: 1*]
- Koren'kov, Y.N., V.V. Klimenko, F.S. Bessarab, and M. Ferster, *Modeling of the Ionospheric F2-region Parameters in Quiet Conditions on January 21-22, 1993*, Geomagnetism & Aeronomy, 42(3), pp. 350-359, May-June 2002
- Makela, J.J., M.C. Kelley, S.A. **González**, N. **Aponte**, and R.P. McCoy, *Ionospheric Topography Maps Using Multiple-Wavelength All-Sky Images*, J. Geophys. Res., 106(A12), pp. 29161-29174, Dec 2001 [*Times Cited: 6*]
- Mathews, J.D., S.A. **González**, M.P. **Sulzer**, Q.H. **Zhou**, J. Urbina, E. Kudeki, and S. Franke, *Kilometer-Scale Layered Structures Inside Spread-F*, Geophys. Res. Lett., 28(22), p. 4167, Nov 2001 [*Times Cited: 2*]
- Meisel, D.D., D. **Janches**, and J.D. Mathews, *Extrasolar Micrometeors Radiating From the Vicinity of the Local Interstellar Bubble*, Astroph. J., 567(1), pp. 323-341, March 2002 [*Times Cited: 8*]
- Pasko, V.P., M.A. Stanley, J.D., U.S. Inan, and T.G. Wood, *Electrical Discharge From a Thundercloud Top to the Lower Ionosphere*, Nature, 416(6877), pp. 152-154, March 2002 [*Times Cited: 26*]
- Patra, A.K., P.B. Rao, V.K. Anandan, A.R. Jain, and G. Viswanathan, *Evidence of Intermediate Layer Characteristics in the Gadanki Radar Observations of the Upper E Region Field-Aligned Irregularities*, Geophys. Res. Lett., 29(14), Art. No. 1696, July 2002 [*Times Cited: 1*]
- Raizada**, S. and C.A. **Tepley**, *Iron Boltzmann Lidar Temperature and Density Observations from Arecibo B A Comparison with Other Techniques*, Geophys. Res. Lett., 29(2), pp. 1-1, CiteID

1560, June 2002

Sethi, N.K. and K.K. Mahajan, *The Bottomside Parameters B0, B1 Obtained from Incoherent Scatter Measurements During a Solar Maximum and Their Comparisons with the IRI-2001 Model*, *Annales Geophys.*, 20(6), pp. 817-822, June 2002 [*Times Cited: 2*]

Swartz, W. E., S.C. Collins, M.C. Kelley, J.J. Makela, E. Kudeki, S. Franke, J. Urbina, N. **Aponte**, S. **González**, M.P. **Sulzer**, and J.S. **Friedman**, *First Observations of an F-region Turbulent Upwelling Coincident with Severe E-region Plasma and Neutral Perturbations*, *J. Atmos. Solar Terr. Phys.*, 64, 1545-1556, Aug-Sep 2002 [*Times Cited: 8*]

Zhou, Q.H., *Incoherent Scatter Spectral Bandwidth and Its Applications*, *Radio Science*, 37(3), pp. 18-1, CiteID 1047, June 2002 [*Times Cited: 1*]

Conference Proceedings:

Janches, D., D.D. Meisel, and J.D. Mathews, *Dynamical and Orbital Properties of The Arecibo Micrometeors*, *Dust in the Solar System and Other Planetary Systems*, Proc. IAU Colloq. 181, Univ. of Kent, Canterbury, UK, 4-10 April 2000, Eds. S.F. Green, I.P. Williams, J.A.M. McDonnell and N. McBride, Oxford: Pergamon, 2002, 414 p. COSPAR colloquia series, 15, p. 34

Mathews, J.D., D. **Janches**, and D.D. Meisel, *Direct Determination of the Micrometeoritic Mass Flux Into The Upper Atmosphere*, *Dust in the Solar System and Other Planetary Systems*, Proc. IAU Colloq. 181, Univ. of Kent, Canterbury, UK, 4-10 April 2000, Eds. S.F. Green, I.P. Williams, J.A.M. McDonnell and N. McBride, Oxford: Pergamon, 2002, 414 p. COSPAR colloquia series, 15, p. 19

Raizada, S. C.A. **Tepley**, J.S. **Friedman**, and Q. **Zhou**, *Observations of Various Metallic Species in the Upper Mesosphere at Arecibo*, American Geophysical Union, Spring Meeting 2002, abstract #SA32A-13 05/2002

Sulzer, M.P., N. **Aponte**, S. **Gonzalez**, *F Region Ion and Electron Temperatures at Jicamarca: Results and Theory Including the Effects of Coulomb Collisions*, AGU Fall Meeting 2001, abstract #SA12A-0664 [Dec 2001]

Zhou, Q., *Observation of Gravity Wave Momentum Deposition in the Mesosphere Using the Arecibo Dual Beam Incoherent Scatter Radar*, American Geophysical Union, Spring Meeting 2002, abstract #SA21A-02, 05/2002

The following papers do not introduce new Arecibo data, but do reference published Arecibo observing results.

SPACE & ATMOSPHERIC SCIENCES

- Colerico, M.J. and M. Mendillo, *The Current State of Investigations Regarding the Thermospheric Midnight Temperature Maximum (MTM)*, J. Atmos. Solar-Terr. Phys., 64(12-14), pp. 1361-1369, Aug 2002 [*Times Cited: 2*]
- Daire, S.E., J.M.C. Plane, S.D. Gamblin, P. Soldán, E.P.F. Lee, and T.G. Wright, *A Theoretical Study of the Ligand-Exchange Reactions of $Na^+ \cdot X$ Complexes ($X=O, O_2, N_2, CO_2$ and H_2O): Implications for the Upper Atmosphere*, J. Atmos. Solar-Terr. Phys., 64(7), pp. 863-870, May 2002
- Gustavsson, B., T. Sergienko, M.T. Rietveld, F. Honary, Å. Steen, B.U.E. Brändström, T.B. Leyser, A.L. Aruliah, T. Aso, M. Ejiri, and S. Marple, *First Tomographic Estimate of Volume Distribution of HF-Pump Enhanced Airglow Emission*, J. Geophys. Res.-Space Physics, 106(A12), pp. 29105-29123, Dec 2001 [*Times Cited: 10*]
- Kuo, S.P., *Oscillating Two-Stream Instability in Ionospheric Heating Experiments*, Physics of Plasmas, 9(4), p. 1456, April 2002 [*Times Cited: 5*]
- Tsunoda, R.T. and R.B. Cosgrove, *Coupled Electrodynamics in the Nighttime Midlatitude Ionosphere*, Geophys. Res. Lett., 28(22), p. 4171-4174, Nov 2001 [*Times Cited: 9*]
- Yang, G.-T., J.-M. Wang, B.-M. Liu, X.-W. Cheng, W.-X. Wan, and S.-S. Gong, *Contribution of the Atmospheric Dynamics to the Sporadic Sodium Layer Formation*, Chinese Physics Lett., 19(4), pp. 602-604, April 2002 [*Times Cited: 2*]
- Yi, F., S. Zhang, H. Zeng, Y. He, X. Yue, J. Liu, H. Lv, and D. Xiong, *Lidar Observations of Sporadic Na Layers Over Wuhan (30.5°N, 114.4°E)*, Geophys. Res. Lett., 29(9), pp. 59-1, CiteID 1345, May 2002

NAIC/ARECIBO OBSERVATORY PUBLICATIONS

October 2002 - September 2003

This list of publications includes papers that result from NAIC support as well as from AO data.

*Bolded names are individuals who are currently scientific staff members, or were at the time of publication submission.

RADIO ASTRONOMY

Refereed Journals:

Benedettini, M., S. Viti, T. Giannini, B. Nisini, P.F. **Goldsmith**, and P. Saraceno, *Comparing SWAS and ISO Observations of Water in Outflows*, *Astron. Astrophys.*, 395, pp. 657-662, Nov 2002

Bergmann, M.P., I. Jorgensen, and G.J. Hill, *Spectroscopy of Low Surface Brightness Galaxies with the Hobby-Eberly Telescope*, *Astron. J.*, 125(1), pp. 116-145, Jan 2003 [*Times Cited: 3*]

Bhat, N.D.R., J.M. Cordes, and S. Chatterjee, *A CLEAN-based Method for Deconvolving Interstellar Pulse Broadening from Radio Pulses*, *Astrophys. J.*, 584(2), pp. 782-790, Feb 2003 [*Times Cited: 7*]

Bogdanov, S., M. Pruszynska, W. Lewandowski, and A. Wolszczan, *Interstellar Scintillation Velocities of a Relativistic Binary PSR B1534+12 and Three Other Millisecond Pulsars*, *Astrophys. J.*, 581(1), pp. 495-500, Dec 2002 [*Times Cited: 5*]

Conselice, C.J., K. **O'Neil**, J.S. Gallagher, and R.F.G. Wyse, *Galaxy Populations and Evolution in Clusters. IV. Deep HI Observations of Dwarf Elliptical Galaxies in the Virgo Cluster*, *Astrophys. J.*, 591(1), pp. 167-184, July 2003 [*Times Cited: 13*]

Darling, J., P.F. **Goldsmith**, D. Li, and R. Giovanelli, *A Search for 6.7 GHz Methanol Masers in OH Megamaser Galaxies at $0.11 < z < 0.27$* , *Astron. J.*, 125(3), pp. 1177-1181, March 2003

Dodson, R., D. Lewis, D. McConnell, and A.A. Deshpande, *The Radio Nebula Surrounding the Vela Pulsar*, *MNRAS*, 343(1), pp. 116-124, July 2003

Ellingson, S.W., and G.A. Hampson, *Mitigation of Radar Interference in L-band Radio Astronomy*, *Astrophys. J. Supp. Ser.*, 147(1), pp. 167-176, July 2003 [*Times Cited: 3*]

Ford, K.E.S., D.A. Neufeld, P.F. **Goldsmith**, and G.J. Melnick, *Detection of OH Toward the Extreme Carbon Star IRC +10216*, *Astrophys. J.*, 589(1), pp. 430-438, May 2003

Freire, P.C., F. Camilo, F., M. Kramer, D.R. Lorimer, A.G. Lyne, R.N. Manchester, and N. D'Amico, *Further Results from the Timing of the Millisecond Pulsars in 47 Tucanae*, *MNRAS*, 340(4), pp. 1359-1374, April 2003

Gupta, Y. and R.T. Gangadhara, *Understanding the Radio Emission Geometry of Multiple-Component Radio Pulsar from Retardation and Aberration Effects*, *Astrophys. J.*, 584(1), pp. 418-426, Feb 2003

- Heiles, C. and T.H. Troland, *The Millennium Arecibo 21-cm Absorption Line Survey. I. Techniques and Gaussian Fits*, *Astrophys. J. Supp. Ser.*, 145(2), pp. 329-354, April 2003 [*Times Cited: 9*]
- Heiles, C. and T.H. Troland, *The Millennium Arecibo 21-CM Absorption Line Survey. II. Properties of the Warm and Cold Neutral Media*, *Astrophys. J.*, 586(2), pp. 1067-1093, April 2003 [*Times Cited: 33*]
- Hofner, P., H. Delgado, B. Whitney, E. Churchwell, and H. Linz, *X-Ray Detection of the Ionizing Stars in Ultracompact HII Regions*, *Astrophys. J. Lett.*, 579(2), pp. L95-L98, Nov 2002
- Konacki, M., A. Wolszczan, and I. Stairs, *Geodetic Precession and Timing of the Relativistic Binary Pulsars PSR B1534+12 and PSR B1913+16*, *Astrophys. J.*, 589(1), pp. 495-502, May 2003
- Konacki, M. and A. Wolszczan, *Masses and Orbital Inclinations of Planets in the PSR B1257+12 System*, *Astrophys. J.*, 591(2), pp. L147-L150, July 2003 [*Times Cited: 11*]
- Li, D. and P.F. **Goldsmith**, *HI Narrow Line Absorption in Dark Clouds*, *Astrophys. J.*, 585(2), pp. 823-839, March 2003 [*Times Cited: 7*]
- Li, D., P.F. **Goldsmith**, and K. Menten, *Massive Quiescent Cores in Orion I: Temperature Structure*, *Astrophys. J.*, 587(1), pp. 262-277, April 2003
- Masters, K., R. Giovanelli, and M.P. Haynes, *Internal Extinction in Spiral Galaxies in the Near-Infrared*, *Astron. J.*, 126(1), pp. 158-174, July 2003
- Monnier-Ragaine, D., W. van Driel, K. **O'Neil**, S.E. Schneider, C. Balkowski, and T.H. Jarrett, *A Search for Low Surface Brightness Galaxies in the Near-Infrared - II. Arecibo HI Line Observations*, *Astron. Astrophys.*, 408(1), p. 67-U48, Sep 2003 [*Times Cited: 1*]
- Navarro, J. S.B. Anderson, and P.C. **Freire**, *The Arecibo 430 MHz Intermediate Galactic Latitude Survey: Discovery of Nine Radio Pulsars*, *Astrophys. J.*, 594(2), pp. 943-951, Sept 2003
- Neufeld, D.A., E.A. Bergin, G.J. Melnick, and P.F. **Goldsmith**, *Submillimeter Wave Astronomy Satellite Mapping Observations of Water Vapor Around Sagittarius B2*, *Astrophys. J.*, 590(2), pp. 882-894, June 2003 [*Times Cited: 6*]
- Neufeld, D.A., M.J. Kaufman, D.J. Hollenbach, P.F. **Goldsmith**, and R. Plume, *Submillimeter Wave Astronomy Satellite and Arecibo Observations of H₂O and OH in a Diffuse Cloud Along the Line of Sight to W51*, *Astrophys. J.*, 580(1), pp. 278-284, Nov 2002
- O'Neil**, K., E. Schinnerer, and P. Hofner, *Further Discoveries of ¹²CO in Low Surface Brightness Galaxies*, *Astrophys. J.*, 588(1), pp. 230-242, May 2003
- Rankin, J.M., S.A. Suleymanova, and A.A. **Deshpande**, *The Topology and Polarization of Sub-beams Associated with the 'drifting' Subpulse Emission of Pulsar B0943 + 10 - III. Analysis of Pushchino 103/40-MHz Observations*, *MNRAS*, 340(4), pp. 1076-1086, April 2003 [*Times Cited: 4*]

- Robishaw, T., J.D. Simon, and L. Blitz, *HI Imaging of LGS 3 and an Apparently Interacting High-Velocity Cloud*, *Astrophys. J. Lett.*, 580(2), L129-L132, Dec 2002 [*Times Cited: 4*]
- Rosenberg, J.L. and S.E. Schneider, *The Contribution of HI-Rich Galaxies to the Damped Ly α Absorber Population at $z = 0$* , *Astrophys. J.*, 585(1), pp. 256-267, March 2003
- Sabatini, S., S. Roberts, and J. Davies, *Dwarf LSB Galaxies and Their Environment: The Virgo Cluster, The Ursa Major Cluster, Isolated Galaxies and Voids*, *Astrophys. & Space Sci.*, 285(1), pp. 97-106, March 2003
- Shore, S.N., L. Magnani, T.N. La Rosa, and M.M. McCarthy, *Mechanisms for the Origin of Turbulence in Non-Star-Forming Clouds: The Translucent Cloud MBM 40*, *Astrophys. J.*, 593(1), pp. 413-425, Aug 2003
- Slysh, V.I., M.A. Voronkov, I.E. Val'Tts, and V. Migenes, *Methanol and H $_2$ O Masers in a Disk around GL2789*, *Astronomy Reports*, 46(12), pp. 969-980, Dec 2002
- Smoker, J.V., L.M. Haffner, F.P. Keenan, R.D. Davies, and D. Pollacco, *Multiwavelength Observations of the M15 Intermediate-Velocity Cloud*, *MNRAS*, 337(2), pp. 385-400, Dec 2002 [*Times Cited: 1*]
- Solanes, J.M., T. Sanchis, E. Salvador-Solé, R. Giovanelli, and M.P. Haynes, *The Three-Dimensional Structure of the Virgo Cluster Region from Tully-Fisher and H I Data*, *Astron. J.*, 124(5), pp. 2440-2452, Nov 2002
- Splaver, E.M., D.J. Nice, Z. Arzoumanian, F. Camilo, A.G. Lyne, and I.H. Stairs, *Probing the Masses of the PSR J0621+1002 Binary System through Relativistic Apsidal Motion*, *Astrophys. J.*, 581(1), pp. 509-518, Dec 2002
- Stairs, I.H., S.E. Thorsett, J.H. Taylor, and A. Wolszczan, *Studies of the Relativistic Binary Pulsar PSR B1534+12: I. Timing Analysis*, *Astrophys. J.*, 581(1), pp. 501-508, Dec 2002 [*Times Cited: 19*]
- Stanimirovic, S., J.M. Weisberg, J.M. Dickey, A. de la Fuente, K. Devine, A. Hedden, and S.B. Anderson, *Detection of OH Absorption Against PSR B1849+00*, *Astrophys. J.*, 591(2), pp. 953-963, Aug 2003 [*Times Cited: 7*]
- Tarter, J.C., *Search for Extraterrestrial Life*, *Encyclopedia of Space Science and Technology*, Hans Mark, ed., Wiley & Sons, Inc., 2003, in press
- van Driel, W., K. O'Neil, V. Cayatte, P.-A. Duc, J.M. Dickey, C. Balkowski, H. Hernandez, J. Iglesias-Paramo, P. Papaderos, J.M. Vilchez, and T.X. Thuan, *Non-Confirmation of Reported HI Clouds Without Optical Counterparts in the Hercules Cluster*, *Astron. Astrophys.*, 399(2), pp. 433-439, Feb 2003 [*Times Cited: 3*]
- Watson, C., E. Araya, M. Sewilo, E. Churchwell, P. Hofner, and S. Kurtz, *Resolution of Distance Ambiguities of Inner Galaxy Massive Star Formation Regions. I.*, *Astrophys. J.*, 587(2), pp. 714-726, April 2003 [*Times Cited: 10*]

Thesis:

- Lommen, A.N., *Precision Multi-Telescope Timing of Millisecond Pulsars: New Limits on the Gravitational Wave Background and Other Results from the Pulsar Timing Array*, Ph.D. Thesis, University of California, Berkeley, 2002
- Sabatini, S., *The Dwarf Low Surface Brightness Galaxy Population of the Virgo Cluster*, Ph.D. Thesis, Cardiff University, 2003

Conference Proceedings:

- Altschuler**, D.R., *The National Astronomy and Ionosphere Center's (NAIC) Arecibo Observatory in Puerto Rico*, in *Single-Dish Radio Astronomy: Techniques and Applications*, ASP Conf Proc., Vol. 278, Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, p. 1-24, Dec 2002
- Araya, E., P. Hofner, E. Churchwell, M., Sewilo, C. Watson, H. Linz, and S. Kurtz, *H₂CO 6 cm Emission Toward IRAS 18566+0408*, American Astronomical Society Meeting 201, #77.09, Dec 2002
- Backus, P.R.; The Project Phoenix Team, *Project Phoenix: SETI Observations from 1200 to 1750 MHz with the Upgraded Arecibo Telescope*, in *Single-Dish Radio Astronomy: Techniques and Applications*, ASP Conf Proc., Vol. 278, Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 525-527, Dec 2002
- Boyer, M.L. and Y. Gupta, *A Study of the Pulsar Emission Region at Multiple Frequencies*, American Astronomical Society Meeting 201, #118.03, Dec 2002
- Cabanela, J., and M. Roscioli, *The Distribution of Low Surface Brightness Galaxies in the Pisces-Perseus Supercluster*, American Astronomical Society Meeting 201, #14.20, Dec 2002
- Camilo, F., *Deep Searches for Young Pulsars*, *Radio Pulsars*, ASP Conf. Proc., Vol. 302, held 26-29 Aug 2002 at Mediterranean Agronomic Inst. of Chania, Crete, Greece, Eds. M. Bailes, D.J. Nice and S.E. Thorsett, (ASP: San Francisco), p. 145, 2003
- Carruba, V., L.M. Carter, M. Cuk, M.A. Jackson, C.E. Jordan, M. Krco, K.L. Masters, J.D. Pandian, D.M. Rothstein, A. Saintonge, B.R. Scharringhausen, K. Spekkens, C.M. Springob, D.A. Kornreich, *The Curious Team, "Curious About Astronomy?": Cornell University's Ask an Astronomer Website*, 34th Annual Lunar and Planetary Science Conference, March 17-21, 2003, League City, Texas, abstract no. 1893, March 2003
- Chomiuk, L., S. Stanimirovic, C. **Salter**, R. Bhat, D. Urosevic, and D. Lorimer, *Arecibo Grasps a Possible Interaction Between SNR G42.8+0.6 and a Molecular Cloud*, American Astronomical Society Meeting 201, #143.02, Dec 2002
- Cordes, J.M., *Pulsar Observations I. -- Propagation Effects, Searching Distance Estimates, Scintillations and VLBI*, *Single-Dish Radio Astronomy: Techniques and Applications*, ASP Conference Proceedings, Vol. 278. Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 227-250, Dec 2002

- Deshpande**, A.A., *From Pulsar Radio Pulse Sequences to Pulsar Polar-Cap Weather*, Conf. Proc. Vikram Sarabhai Research Award Lecture, Physical Research Laboratory, Ahmedabad, 2002
- Finley, D.G., J.L. **Alonso**, D. **Altschuler**, F. Cianciolo, L. Cuesta, R. Harrison, M.K. Hemenway, P. Michaud, I. Morison, S. Preston, C. Rijdsjk, T. Teays, R.M. West, and M. Wetzel, *The STate of the ARt Telescope Educational Collaboration (STARTEC)*, American Astronomical Society Meeting 201, #10.06, Dec 2002
- Ghosh**, T., *Spectrum Management*, Single-Dish Radio Astronomy: Techniques and Applications, ASP Conference Proceedings, Vol. 278, Eds by S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, 2002, p. 447-452, Dec 2002
- Ghosh**, T. and C. **Salter**, *Arecibo Spectral Baselines in the Presence of Continuum Emission*, in Single-Dish Radio Astronomy: Techniques and Applications, ASP Conf Proc., Vol. 278, Edited by S. Stanimirovic, D. Altschuler, P. Goldsmith and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, 2002, p. 521-524, Dec 2002
- Ghosh**, T. and C.J. **Salter**, *Arecibo Spectral Baselines in the Presence of Continuum Emission*, ASP Conference Series No. 278; Single-Dish Radio Astronomy: Techniques and Applications, Eds. S. Stanimirovic, D.A. Altschuler, P.F. Goldsmith, C.J. Salter, p. 521, 2003
- Goldsmith**, P.F., *Radio Telescopes and Measurements at Radio Wavelengths*, Single-Dish Radio Astronomy: Techniques and Applications, ASP Conference Proceedings, Vol. 278. Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astronomical Society of the Pacific, pp. 45-79, Dec 2002
- Gupta, Y., P. Gothoskar, and N.D.R. **Bhat**, *First Results from Simultaneous Dual Frequency Observations of Pulsars*, The Universe at Low Radio Frequencies, Proc. of IAU Symposium 199, held 30 Nov - 4 Dec 1999, Pune, India. Eds. A. Pramesh Rao, G. Swarup, and Gopal-Krishna, p. 369, 2002
- Heiles, C., *A Heuristic Introduction to Radioastronomical Polarization*, Single-Dish Radio Astronomy: Techniques and Applications, ASP Conference Proceedings, Vol. 278. Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 131-152, Dec 2002
- Helton, L.A. and V.I. **Slysh**, *All-Stokes Survey of OH Masers in Star Forming Regions: Search for Possible Zeeman Splitting*, American Astronomical Society Meeting 201, #93.20, Dec 2002
- Hessels, J.W.T., S.M. Ransom, I.H. Stairs, V.M. Kaspi, D. Backer, P.C.C. **Freire**, and D.R. Lorimer, *An L-band Search for Pulsars in Globular Clusters with the Arecibo and Green Bank Telescopes*, American Astronomical Society, HEAD meeting #35, #14.04, March 2003
- Hoffman, G.L., and E.E. Salpeter, *Mini-HVC and Compact HVC: Galactic Fuel, Tidal Debris or Proto-Dwarf Galaxies*, in The Outer Edges of Dwarf Irregular Galaxies, 2002 Lowell Workshop Online Proceedings, eds. D. Hunter and S. Oey
- Jiménez-Esteban, F., D. Engels, P. García-Lario, and L. Agudo-Mérida, *Identification and NIR Photometry of the Arecibo Sample of OH/IR Stars*, in Mass-losing pulsating stars and their

- circumstellar matter. Workshop, May 13-16, 2002, Sendai, Japan, Eds. Y. Nakada, M. Honma and M. Seki. Astrophysics and Space Science Library, Vol. 283, Dordrecht: Kluwer Academic Publishers, pp. 223-224, 2003
- Korpela, E.J., P. Demorest, E. Heien, C. Heiles, and D. Werthimer, *SETH I@Berkeley- A Piggyback 21-cm Sky Survey at Arecibo*, in *Seeing Through the Dust: The Detection of HI and the Exploration of the ISM in Galaxies*, ASP Conf. Proc., Vol. 276, Eds. A.R. Taylor, T.L. Landecker, and A.G. Willis, San Francisco: Astronomical Society of the Pacific, p. 100, Dec 2002
- Lewis**, B.M., *On the Life and Death of OH/IR Stars*, Single-Dish Radio Astronomy: Techniques and Applications, ASP Conference Proceedings, Vol. 278. Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 519-520, Dec 2002
- Lewis**, B.M., *2MASS Data Shows That Most Red Arecibo OH/IR Stars Have Detached Shells*, American Astronomical Society Meeting 202, #32.19, May 2003
- Lockman, F.J., *Stray Radiation: Causes, Curses, and Cures*, in Single-Dish Radio Astronomy: Techniques and Applications, ASP Conf Proc., Vol. 278, Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 397-411, 2002
- Lovell, A.J., E.S. **Howell**, F.P. Schloerb, B.M. **Lewis**, and A.A. **Hine**, *Arecibo Observations of the 18 cm OH Lines of Six Comets*, Proc. of Asteroids, Comets, Meteors - ACM 2002. Int'l Conf., 29 July - 2 August 2002, Berlin, Germany. Ed. B. Warmbein. ESA SP-500. Noordwijk, Netherlands: ESA Publications Division, ISBN 92-9092-810-7, 2002, pp. 681-684, Nov 2002
- Magnani, L., M. McCarthy, R. Sandin-Alvarez, and R. Chastain, *The HI Environment of MBM40*, American Astronomical Society Meeting 201, #112.27, Dec 2002
- Mantovani, F., M. Bondi, D.J. Saikia, W. Junor, C.J. **Salter**, and R. Ricci, *Two-Sided Radio Jets in B1524-136*, in *The Third Workshop on Compact Steep Spectrum and GHz-Peaked Spectrum Radio Sources*, Publ. Astr. Soc. Australia, 20, pp. 85-87, 2003
- Mantovani, F., W. Junor, D.J. Saikia, and C.J. **Salter**, *The Polarized Gently Bent Jet of 3C43*, in *The Third Workshop on Compact Steep Spectrum and GHz-Peaked Spectrum Radio Sources*, Publ. Astr. Soc. Australia, 20, pp. 123-125, 2003
- Mantovani, F., W. Junor, D.J. Saikia, and C.J. **Salter**, *Milliarcsecond Scale Rotation Measure in Two CSSs*, I.A.U. Symp. No. 205, 2003.
- Masters, K., M.P. Haynes, and R. Giovanelli, *Simulations of the Effect of Peculiar Velocities on the Measurement of the HI Mass Function*, American Astronomical Society Meeting 203, #26.03, Dec 2003
- McLaughlin, M.A., D.R. Lorimer, Z. Arzoumanian, D.C. Backer, J.M. Cordes, A. Fruchter, K. Xilouris, and A.N. Lommen, *New Pulsars from Arecibo Drift-Scan Searches*, Radio Pulsars, ASP Conference Proceedings, Vol. 302, 26-29 August 2002 at Mediterranean Agronomic Inst. of Chania, Crete, Greece, Eds. by M. Bailes, D.J. Nice and S.E. Thorsett. San Francisco: Astronomical Society of the Pacific, p. 129, 2003

- Molotov, I., A. Chuprikov, S. Likhachev, C. **Salter**, T. **Ghosh**, F. Ghigo, and S. Dougherty, *First VLBI Observations with Arecibo in an International S2 Ad-hoc Array*, in *Single-Dish Radio Astronomy: Techniques and Applications*, ASP Conf Proc., Vol. 278, Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 507-510, Dec 2002
- Monnier-Ragaigne, D., W. van Driel, C. Balkowski, S. Schneider, T.H. Jarrett, and K. **O'Neil**, *A Study of 2Mass Low Surface Brightness Galaxies*, in *The Evolution of Galaxies II - Basic Building Blocks*, Netherlands: Khaver Academic Publishers, 2002
- Nice, D.J., E.M. Splaver, and I.H. Stairs, *Neutron Star Masses from Arecibo Timing Observations of Five Pulsar-White Dwarf Binary Systems*, in *Radio Pulsars*, ASP Conference Proc., Vol. 302, 26-29 August 2002 at Mediterranean Agronomic Inst. of Chania, Crete, Greece, eds. M. Bailes, D.J. Nice and S.E. Thorsett. San Francisco: Astronomical Society of the Pacific, p. 75, 2003
- Nowakowski, L.A., N.D.R. **Bhat**, and D.R. Lorimer, *Arecibo Single-Pulse Studies of PSR B0950+08: Inter Pulse and Bridge Emissions*, American Astronomical Society Meeting 201, #118.02, Dec 2002
- O'Neil**, K., *Single-Dish Calibration Techniques at Radio Wavelengths*, *Single-Dish Radio Astronomy: Techniques and Applications*, ASP Conference Proceedings, Vol. 278. Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 293-311, Dec 2002
- O'Neil**, K., J. Eder, G. Bothun, and J. Schombert, *Exploring the Sensitivity Limit: 21 cm Observations of Low Surface Brightness Galaxies with the Arecibo Telescope*, in *Single-Dish Radio Astronomy: Techniques and Applications*, ASP Conf Proc., Vol. 278, Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, p. 511-513, Dec 2002
- Ransom, S.M., J.W.T. Hessels, I.H. Stairs, V.M. Kaspi, D.C. Backer, L.J. Greenhill, and D.R. Lorimer, *Recent Globular Cluster Searches with Arecibo and the Green Bank Telescope*, ASP Conference Proceedings, Vol. 302, Radio Pulsars, 26-29 August 2002 at Mediterranean Agronomic Ins. of Chania, Crete, Greece, eds. M. Bailes, D. Nice and S. Thorsett, p. 371, 2003
- Rosenberg, J.L. and S.E. Schneider, *The Contribution of HI-rich Galaxies to the Damped Lyman-alpha Absorber Population at $z = 0$* , *The IGM/Galaxy Connection: The Distribution of Baryons at $z = 0$* , ASSL Conference Proceedings Vol. 281. Eds J.L. Rosenberg and M.E. Putman. ISBN: 1-4020-1289-6, Kluwer Academic Publishers, Dordrecht, p. 41, 2003
- Saikia, D.J., S. Jeyakumar, F. Mantovani, C.J. **Salter**, R.E. Spencer, P. Thomasson, and P.J. Wiita, *Symmetry Parameters of CSS Sources: Evidence of Fuelling?*, *Publications of the Astronomical Society of Australia*, 20(1), pp. 50-56, 2003
- Salter**, C.J., *Continuum 2: Specific Applications*, *Single-Dish Radio Astronomy: Techniques and Applications*, ASP Conference Proceedings, Vol. 278. Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 173-185, Dec 2002

- Salter**, C.J., *Single-Dish Radio Telescopes of the World*, Single-Dish Radio Astronomy: Techniques and Applications, ASP Conference Proceedings, Vol. 278. Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, p. 493-503, Dec 2002
- Salter**, C.J., S. Jeyakumar, D.J. Saikia, T. Ghosh, and J. Stutzki, *HI Absorption Towards Compact Steep Spectrum Radio Sources*, American Astronomical Society Meeting 202, #42.10, May 2003
- Slysh**, V., *Maser Emission from Icy Planets Orbiting Young Stars*, Exotic Stars as Challenges to Evolution, ASP Conference Proceedings, Vol. 279. Also IAU Colloq. 187, Eds. C.A. Tout and W. Van Hamme. ISBN: 1-58381-122-2. San Francisco: Astron. Soc. of the Pacific, p. 273, 2002
- Stairs, I.H., *Pulsar Observations II.- Coherent Dedispersion Polarimetry, and Timing*, Single-Dish Radio Astronomy: Techniques and Applications, ASP Conference Proc., Vol. 278. Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 251-269, Dec 2002
- Stanimirovic**, S., L. Staveley-Smith, P.A. Jones, J.M. van der Hulst, Tj.R. Bontekoe, and D.J.M. Kester, *"What is Cool" About Cool Gas and Dust in the Small Magellanic Cloud?*, in Proc. of the 3rd Guillermo Haro Astrophysics Conference on Cosmic Evolution and Galaxy Formation, ASP Conf. Series, eds. J. Franco, E.I Terlevich, O. Lopez-Cruz & I. Aretxaga, p. 218, 2002
- Stanimirovic, S., J.M. Dickey, J.M. Weisberg, A. de la Fuente, K. Devine, and A. Hedden, *PSR B1849+00 Probes the Tiny-Scale Molecular Gas?*, American Astronomical Society Meeting 201, #112.09, Dec 2002
- Stanimirovic**, S., *Short-Spacings Correction from the Single-Dish Perspective*, Single-Dish Radio Astronomy: Techniques and Applications, ASP Conference Proc., Vol. 278. Edited by S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 375-396, Dec 2002
- Stevenson, S.L., L.K. Hunt, T. Ghosh, and J. Eder, *H I Evolutionary Studies of IR-Selected AGN*, American Astronomical Society Meeting 201, #52.05, Dec 2002
- Wilcox, R.E., K. O'Neil, and J.A. Eder, *New Standard Catalog of Arecibo HI Observations*, American Astronomical Society Meeting 201, #52.14, Dec 2002

SOLAR SYSTEM STUDIES

Refereed Journals:

- Baron, J.E., G.L. Tyler, and R.A. Simpson, *Three-Dimensional Numerical Modeling of Refraction and Reflection Scattering From Icy Galilean Satellites*, Icarus, 164(2), pp. 404-417, Aug 2003
- Harmon**, J.K., *Planetary Delay-Doppler Radar and the Long-Code Method*, IEEE Trans. Geosci. Remote Sensing, 40, pp. 1904-1916, 2002

Hudson, R.S., S.J. Ostro, and D.J. Scheeres, *High-Resolution Model of Asteroid 4179 Toutatis*, *Icarus*, 161(2), p. 346-355, Feb 2003

Ostro, S.J., R.S. Hudson, L.A.M. Benner, J.D. Giorgini, C. Magri, J.L. Margot, and M.C. **Nolan**, *Asteroid Radar Astronomy*, in *Asteroids III* (W. Bottke, A. Cellino, P. Paolicchi and R.P. Binzel, eds.), Univ. Arizona Press, Tucson, pp. 151-168, 2002

Rivkin, A.S., E.S. **Howell**, F. Vilas, and L.A. Lebofsky, *Hydrated Minerals on Asteroids: The Astronomical Record*, in *Asteroids III*, eds. W.F. Bottke, A. Cellino, P. Paolicchi, and R.P. Binzel, Univ. of Arizona Press, Tucson, pp. 235-253, 2002

Conference Proceedings:

Benner, L.A.M., M.C. **Nolan**, J.L. Margot, S.J. Ostro, and J.D. Giorgini, *Radar Imaging of Binary Near-Earth Asteroid 1998 ST27*, American Astronomical Society, DPS meeting #35, #24.01, May 2003

Black, G.J. and D.B. **Campbell**, *Radar-Interferometric Imaging of Near Earth Asteroids*, American Astronomical Society, DPS meeting #35, #34.02, May 2003

Butler, B.J., J.K. Harmon, and M.A. Slade, *Radar Imagery of Mercury*, Mercury, 25th meeting of the IAU, Joint Discussion 2, 16 July, 2003, Sydney, Australia, meeting abstract, 2003

Campbell, B.A., D.B. **Campbell**, and M. **Nolan**, *New High-Resolution 70-cm Wavelength Radar Images of the Moon*, 34th Annual Lunar and Planetary Science Conf., March 17-21, 2003, League City, Texas, abstract no.1700, March 2003

Campbell, B.A., D.B. **Campbell**, and A. Freeman, *Long-Wavelength Imaging Radar - A Window on Near-Surface Processes*, American Geophysical Union, Fall Meeting 2003, abstract #P42B-05, Dec 2003

Campbell, D.B., *Measurement in Radio Astronomy*, Single-Dish Radio Astronomy: Techniques and Applications, ASP Conference Proceedings, Vol. 278, Eds. S. Stanimirovic, D. Altschuler, P. Goldsmith, and C. Salter. ISBN: 1-58381-120-6. San Francisco: Astron. Soc. of the Pacific, pp. 81-90, Dec 2002

Campbell, D.B., R.S. Hudson, and J.L. Margot, *Advances in Planetary Radar Astronomy*, URSI - Rev. of Radio Science 1999-2002; W. Ross Stone, Ed., John Wiley & Sons, Inc. (ISBN: 0-471-26866-6), pp. 869-899, 2002

Campbell, D.B., J.K. **Harmon**, M.C. **Nolan**, and S.J. Ostro, *Radar Observations of Comet Nuclei and Comae*, in Physical Properties and Morphology of Small Solar System Bodies, 25th meeting of the IAU, Joint Discussion 19, 23 July 2003, Sydney, Australia

Carter, L.M., D.B. **Campbell**, B.A., **Campbell**, and J.L. Margot, *Searching for Surficial Deposits on Venus Using Multi-Polarization Radar*, 34th Annual Lunar and Planetary Science Conf., March 17-21, 2003, League City, Texas, abstract no. 1809, March 2003

Carter, L. M., D.B. **Campbell**, and M.C. Nolan, *Searching for Regolith on the Asteroid 1999 JM8 Using Multi-Polarization Radar Imaging*, American Astronomical Society, DPS meeting #35, #34.05, May 2003

- Haldemann, A.F.C., K.W. Larsen, R.F. Jurgens, M.A. Slade, B.J. Butler, R. Arvidson, J.K. **Harmon**, *Gusev and Meridiani Will Look Different: Radar Scattering Properties of the Mars Exploration Rover Landing Sites*, Sixth International Conference on Mars, July 20-25 2003, Pasadena, California, abstract no. 3272
- Magri, C., M.C. **Nolan**, S.J. Ostro, and J.D. Giorgini, *Radar Imaging of Asteroid 654 Zelinda*, Proc. of Asteroids, Comets, Meteors - ACM 2002. Int'l Conf., 29 July - 2 August 2002, Berlin, Germany. Ed. B. Warmbein. ESA SP-500. Noordwijk, Netherlands: ESA Publications Division, ISBN 92-9092-810-7, pp. 485-488, Nov 2002
- Margot, J.L., M.C. **Nolan**, E.S. **Howell**, A.A. **Hine**, P.D. Nicholson, D.B. **Campbell**, J.D. Giorgini, S.R. Chesley, L.A.M. Benner, S.J. Ostro, R.S. Hudson, P. Pravec, and D. Vokrouhlický, *The Dynamics and Shape of the Minor Planet 2000 PH5*, American Astronomical Society, DPS Meeting #35, #24.05, May 2003
- Rivkin, A.S., E.S. **Howell**, S.J. Bus, M. Hicks, W.T. Reach, T.H. Jarrett, and R.P. Binzel, *Spectroscopy and Photometry of the Earth Grazer 2002 NY40*, 34th Annual Lunar and Planetary Science Conf., March 17-21, 2003, League City, Texas, abstract no. 1722, 2003
- Slade, M.A., R.F. Jurgens, J.K. **Harmon**, L.J. Harcke, and J.L. Margot, *Goldstone/Arecibo 3.5-CM Radar Imaging: Mercury North Pole*, Mercury, 25th meeting of the IAU, Joint Discussion 2, 16 July, 2003, Sydney, Australia, meeting abstract, 2003

SPACE & ATMOSPHERIC SCIENCES

Refereed Journals:

- Bernhardt, P.A., N.A. Gondarenko, P.N. Guzdar, F.T. Djuth, C.A. **Tepley**, M.P. **Sulzer**, S.L. Ossakow, and D.L. Newman, *Using Radio-Induced Aurora To Measure The Horizontal Structure Of Ion Layers In The Lower Thermosphere*, J. Geophys. Res.-Space Phys., 108(A9): Art. No. 1336, Sept 2003 [*Times Cited: 1*]
- Bishop, R.L. and G.D. Earle, *Metallic Ion Transport Associated with Midlatitude Intermediate Layer Development*, J. Geophys. Res.-Space Phys., 108, SIA 3-1, CiteID 1019, Jan 2003 [*Times Cited: 2*]
- Boyer, E., P. Larzabal, C. Adnet, and M. Petitdidier, *Parametric Spectral Moments Estimation for Wind Profiling Radar*, IEEE Trans. Geoscience & Remote Sensing, 41(8), pp. 1859-1868, Aug 2003 [*Times Cited: 2*]
- Collins, R.L., M.C. Kelley, M.J. Nicolls, C. Ramos, T. Hou, T.E. Stern, K. Mizutani, K. and T. Itabe, *Simultaneous Lidar Observations of a Noctilucent Cloud and an Internal Wave in the Polar Mesosphere*, J. Geophys. Res.-Atmos., 108(D8), Art. No. 8435, Jan 2003
- Foster, J.C. and H.B. Vo, *Average Characteristics and Activity Dependence of The Subauroral Polarization Stream*, J. Geophys. Res.-Space Phys., 107(A12), pp. SIA 16-1, CiteID 1475, Dec 2002

- Friedman, J.S.**, *Tropical Mesopause Climatology Over the Arecibo Observatory*, Geophys. Res. Lett., 30, pp. 1642-1645, June 2003 [*Times Cited: 3*]
- Janches, D.**, A. Pellinen-Wannberg, G. Wannberg, A. Westman, I. Häggström, and D.D. Meisel, *Tristatic Observations of Meteors Using the 930 MHz EISCAT Radar System*, J. Geophys. Res.-Space Phys., 107, SIA 14-1, Nov 2002
- Janches, D.**, M.C. Nolan, D.D. Meisel, J.D. Mathews, Q.H. Zhou, and D.E. Moser, *On The Geocentric Micrometeor Velocity Distribution*, J. Geophys. Res.-Space Phys., 108(A6), Art. No. 1222, June 2003 [*Times Cited: 3*]
- Kelley, M.C., J.J. Makela, J.L. Chau, and M.J. Nicolls, *Penetration Of The Solar Wind Electric Field Into The Magnetosphere/Ionosphere System*, Geophys. Res. Lett., 30(4), Art. No. 1158, Feb 2003
- Makela, J.J., M.C. Kelley, S.A. **González**, N. **Aponte**, and J.J. Sojka, *Mid-Latitude Plasma and Electric Field Measurements During Space Weather Month, September 1999*, J. Atmos. Solar-Terr. Phys., 65(10), pp. 1077-1085, July 2003 [*Times Cited: 1*]
- Mathews, J.D., J. Doherty, C.H. Wen, S.J. Briczinski, D. **Janches**, and D.D. Meisel, *An Update on UHF Radar Meteor Observations and Associated Signal Processing Techniques at Arecibo Observatory*, J. Atmos. Solar-Terr. Phys., 65(10), pp. 1139-1149, July 2003 [*Times Cited: 4*]
- Meisel, D.D., D. **Janches**, and J.D. Mathews, *The Size Distribution of the Arecibo Interstellar Particles and its Implications*, Astrophys. J., 579(2), pp. 895-904, Nov 2002 [*Times Cited: 5*]
- Pandey, V.K., N.K. Sethi, and K.K. Mahajan, *Dependence of F2-Peak Height on Solar Activity: A Study with Incoherent Scatter Measurements*, Adv. Space Res., 31(3), pp. 543-548, 2003 [*Times Cited: 1*]
- Raizada, S.** and C.A. **Tepley**, *Seasonal Variation of Mesospheric Iron Layers at Arecibo: First Results from Low-Latitudes*, Geophys. Res. Lett., 30(3), Art No. 1082, Jan 2003 [*Times Cited: 3*]
- Sojka, J.J., D.C. Thompson, R.W. Schunk, J.V. Eccles, J.J. Makela, M.C. Kelley, S.A. **González**, N. **Aponte**, and T.W. Bullett, *Ionospheric Data Assimilation: Recovery of Strong Mid-Latitudinal Density Gradients*, J. Atmos. Solar-Terr. Phys., 65(10), pp. 1087-1097, July 2003
- Tepley, C.A.**, S. **Raizada**, Q. **Zhou**, and J.S. **Friedman**, *First Simultaneous Observations of Ca⁺, K, and Electron Density Using Lidar and Incoherent Scatter Radar at Arecibo*, Geophys. Res. Lett., 30(1), Art. No. 1009, Jan 2003 [*Times Cited: 6*]
- Tepley, C.A.**, S. **Raizada**, Q. **Zhou**, and J.S. **Friedman**, *Correction to 'First Simultaneous Observations of Ca⁺, K, and Electron Density Using Lidar and Incoherent Scatter Radar at Arecibo'*, Geophys. Res. Lett., 30, 56-1, March 2003
- Vlasov, M.N., M.C. Kelley, J.J. Makela, and M.J. Nicolls, *Intense Nighttime Flux From The Plasmasphere During a Modest Magnetic Storm*, J. Atmos. Solar-Terr. Phys., 65(10), pp. 1099-1105, July 2003 [*Times Cited: 4*]

Theses:

- Collins, S.C., *Resonance Lidar Development and Mesospheric Observations at the Arecibo Observatory*, Ph.D. thesis, Cornell University, Ithaca, NY, 2002
- Makela, J.J., *Midlatitude Ionospheric Studies Using the Global Positioning System and Airglow Cameras*, Ph.D. Thesis, Cornell University, Ithaca, NY, 2002
- Urbina, J., *VHF Radar Studies of the Mid-Latitude E-Region Ionosphere from Camp Santiago, P.R.*, Ph.D., thesis, University of Illinois, Urbana-Champaign, IL, 2002
- Wilford, C.R., *Mathematical Modelling of the Terrestrial Ionosphere: Helium Ion Behaviour*, Ph.D. Thesis, University of Sheffield, United Kingdom, 2002

Conference Proceedings:

- Janches**, D., D.D. Meisel, M.C. **Nolan**, B.D. Bartlett, J.D. Mathews, Q.H. Zhou, and D.E. Moser, *Orbital Properties of Micron-Size Dust Determined Using the Arecibo 430 MHz Dual-Beam Radar*, Astrophysics of Dust, Estes Park, Colorado, May 26 - 30, 2003. Edited by Adolf N. Witt, meeting abstract
- Mathews, J.D., J. Doherty, C.H. Wen, D. **Janches**, and D.D. Meisel, *Meteor Science Issues Addressed Via UHF Radar Meteor Observations at Arecibo Observatory*, in Proc. of Asteroids, Comets and Meteors – ACM 2002 Int'l Conf. July 29th- August 2nd, 2002, Berlin, Germany, Ed. B. Warmbein. ESA SP-500. Noordwijk, Netherlands: ESA Publications Division, ISBN 92-9092-810-7, pp. 253-256, 2002
- Mendillo, M., F. Roesler, C. Gardner, and M.P. **Sulzer**, *The Application of Terrestrial Aeronomy Groundbased Instruments to Planetary Studies*, in Atmospheres in the Solar System: Comparative Aeronomy, eds. M. Mendillo, A. Nagy, and J.H., Waite, Vol. 130 of Geophysical Monograph Series, Amer. Geophys. Union, ISBN: 0-87590-989-2, AGU Code GM130-9892, 2002
- Moser, D.E., D. **Janches**, D.D. Meisel, M.C. **Nolan**, B.D. Bartlett, and J.D. Mathews, *Monitoring the Yearly Sporadic Micrometeor Flux into the Upper Atmosphere Using the Arecibo Dual-Beam 430 MHz Radar*, American Astronomical Society, 201st AAS Meeting, #45.02; BAAS, 34, p. 1171, Dec 2002

The following papers do not introduce new Arecibo data, but do reference published Arecibo observing results.

RADIO ASTRONOMY

Lang, R.H., P.J. Boyce, V.A. Kilborn, R.F. Minchin, M.J. Disney, C.A. Jordan, M. Grossi, D.A. Garcia, K.C. Freeman, S. Phillipps, and A.E. Wright, *First Results from the HI Jodrell All Sky Survey: Inclination-Dependent Selection Effects in a 21-Cm Blind Survey*, MNRAS, 342(3), pp. 738-758, July 2003 [*Times Cited: 9*]

SPACE & ATMOSPHERIC SCIENCES

Gong, S.S., G.T. Yang, J.M. Wang, B.M. Liu, X.W. Cheng, J.Y. Xu, and W.X. Wan, *Occurrence and Characteristics of Sporadic Sodium Layer Observed by Lidar at a Mid-Latitude Location*, J. Atmos. Solar-Terr. Phys., 64(18), pp. 1957-1966, Dec 2002 [*Times Cited: 1*]

Lee, C.-C., J.-Y. Liu, C.-J. Pan, and H.-H. Hsu, *The Intermediate Layers and Associated Tidal Motions Observed by a Digisonde in the Equatorial Anomaly Region*, Annales Geophysicae, 21(4), pp. 1039-1045, April 2003

Otsuka, Y., T. Kadota, K. Shiokawa, T. Ogawa, S. Kawamura, S. Fukao, and S.-R. Zhang, *Optical and Radio Measurements of a 630-nm Arglow Enhancement Over Japan on 9 September 1999*, J. Geophys. Res.-Space Physics, 108(A6), pp. SIA 6-1, CiteID 1252, June 2003 [*Times Cited: 2*]

Titheridge, J.E., *Ionisation Below the Night /F2 Layer - A Global Model*, J. Atmos. Solar-Terr. Phys., 65(9), pp. 1035-1052, June 2003 [*Times Cited: 3*]

NAIC/ARECIBO OBSERVATORY PUBLICATIONS

October 1, 2003 – September 30, 2004

This list of publications includes papers that result from NAIC support as well as from AO data.

*Bolded names are individuals who are currently scientific staff members, or were at the time of publication submission.

RADIO ASTRONOMY

Refereed Journals:

Araya, E., P. Hofner, P.F. Goldsmith, S. Slysh, and T. Takano, *A C-Band Spectral Scan of IRC + 10°216*, *Astrophys. J.*, 596(2), pp. 556-560, Oct 2003 [*Times Cited: 2*]

Bhat, N.D.R., J.M. Cordes, F. Camilo, D.J. Nice, and D.R. Lorimer, *Multifrequency Observations of Radio Pulse Broadening and Constraints on Interstellar Electron Density Microstructure*, *Astrophys. J.*, 605(2), pp. 759-783, April 2004 [*Times Cited: 3*]

Champion, D.J., D.R. Lorimer, M.A. McLaughlin, J.M. Cordes, Z. Arzoumanian, J.M. Weisberg, and J.H. Taylor, *PSR J1829+2456: A Relativistic Binary Pulsar*, *MNRAS*, 350(4), pp. L61-L65, June 2004 [*Times Cited: 3*]

Cordes, J.M. and M.A. McLaughlin, *Searches for Fast Radio Transients*, *Astrophys. J.*, 596(2), pp. 1142-1154, Oct 2003

Cordes, J.M., N.D.R. Bhat, T. Hankins, and M.A. McLaughlin, *The Brightest Pulses in the Universe: Multifrequency Observations of the Crab Pulsars's Giant Pulses*, *Astrophys. J.*, 612(1), pp. 375-388, Sept 2004 [*Times Cited: 2*]

Davies, J., R. Minchin, S. Sabatini, W. van Driel, M. Baes, P. Boyce, W.J.G. de Block, M. Disney, R. Evans, V. Kilborn, R. Lang, S. Linder, S. Roberts, and R. Smith, *A Multi-Beam HI Survey of the Virgo Cluster- Two Isolated HI Clouds?*, *MNRAS*, 349(3), pp. 922-932, April 2004 [*Times Cited: 8*]

Freire, P.C.C., Y. Gupta, S.M. Ransom, and C.H. Ishwara-Chandra, *Giant Metrewave Radio Telescope Discovery of a Millisecond Pulsar in a Very Eccentric Binary System*, *Astrophys. J. Lett.*, 606(1), pp. L53-L56, May 2004

Heiles, C. and T.H. Troland, *The Millennium Arecibo 21-Centimeter Absorption-Line Survey. III. Techniques for Spectral Polarization and Results for Stokes V*, *Astrophys. J. Supp. Ser.*, 151(2), pp. 271-297, April 2004 [*Times Cited: 2*]

Heiles, C., *Observational Magnetogasdynamics: 21 Years of HI Zeeman Splitting Measurements... and More*, *Astrophys. & Space Sci.*, 292(1), pp. 77-88, Aug 2004 [*Times Cited: 1*]

Hessels, J.W.T., M.S.E. Roberts, S.M. Ransom, V.M. Kaspi, R.W. Romani, C.Y. Ng, P.C.C. **Freire**, and B.M. Gaensler, *Observations of PSR J2021+3651 and its X-ray Pulsar Wind Nebula G75.2+0.1*, *Astrophys. J.*, 612(1), pp. 389-397, Sept 2004 [*Times Cited: 3*]

Hill, A.S., D.R. Stinebring, H.A. Barnor, D.E. Berwick, and A.B. Webber, *Pulsar Scintillation Arcs. I. Frequency Dependence*, *Astrophys. J.*, 599(1), pp. 457-464, Dec 2003 [*Times Cited: 4*]

- Hoffman, G.L., N. Brosch, E.E. Salpeter, and N.J. Carle, *Neutral Hydrogen Mapping of Virgo Cluster Blue Compact Dwarf Galaxies*, *Astron. J.*, 126(6), pp. 2774-2796, Dec 2003
- Hunt, S.M., M. Oppenheim, S. Close, P.G. Brown, F. McKeen, and M. Minardi, *Determination of the Meteoroid Velocity Distribution at the Earth Using High-Gain Radar*, *Icarus*, 168(1), pp. 34-42, March 2004 [*Times Cited: 3*]
- Kalenskii, S.V., V.I. Slysh, P.F. Goldsmith, and L.E.B. Johnsson, *A 4-6 GHz Spectral Scan and 8-10 GHz Observations of the Dark Cloud in TMC-1*, *Astrophys. J.*, 610(1), pp. 329-338, July 2004 [*Times Cited: 1*]
- Kozlova, E.A., *The Nature of Anomalous Formations in the Polar Regions of Mercury and the Moon*, *Solar System Res.*, 38(5), pp. 335-346, Sep-Oct 2004
- Lewandowski, W., A. Wolszczan, G. Feiler, M. Konacki, and T. Soltysinski, *Arecibo Timing and Single Pulse Observations of 18 Pulsars*, *Astrophys. J.*, 600(2), pp. 905-913, Jan 2004 [*Times Cited: 4*]
- Lewis**, B. M., D.A. Kopon, and Y. Terzian, *2MASS Counterparts for OH/IR Stars. I. The Arecibo Sample*, *Astron. J.*, 127(1), pp. 501-512, Jan 2004 [*Times Cited: 2*]
- Lorimer, D.R., M.A. McLaughlin, Z. Arzoumanian, K.M. Xilouris, J.M. Cordes, A.N. Lommen, A.S. Fruchter, A.M. Chandler, and D.C. Backer, *PSR J0609+2130: A Disrupted Binary Pulsar?*, *MNRAS*, 347(2), pp. L21-L25, Jan 2004 [*Times Cited: 4*]
- Lyne, A.G., M. Burgay, M. Kramer, A. Possenti, R.N. Manchester, F. Camilo, M.A. McLaughlin, D.R. Lorimer, N. D'Amico, B.C. Joshi, J. Reynolds, and P.C.C. **Freire**, *A Double-Pulsar System: A Rare Laboratory for Relativistic Gravity and Plasma Physics*, *Science*, 303(5661), pp. 1153-1157, Feb 2004
- McConnell, D., A.A. **Deshpande**, J.G. Ables, and T. Connors, *The Radio Luminosity Distribution of Pulsars in 47 Tucanae*, *MNRAS*, 348(4), pp. 1409-1414, March 2004
- McLaughlin, M.A. and J.M. Cordes, *Searches for Giant Pulses from Extragalactic Pulsars*, *Astrophys. J.*, 596(2), pp. 982-996, Oct 2003
- McLaughlin, M.A., M. Kramer, A.G. Lyne, D.R. Lorimer, I.H. Stairs, A. Possenti, R.N. Manchester, P.C.C. **Freire**, B.C. Joshi, M. Burgay, F. Camilo, and N. D'Amico, *The Double Pulsar System J0737-3039: Modulation of the Radio Emission from B by Radiation from A*, *Astrophys. J. Lett.*, 613(1), pp. L57-L60, Sept 2004
- Momjian**, E., J.D. Romney, C.L. Carilli, and T.H. Troland, *Sensitive VLBI Continuum and HI Absorption Observations of NGC 7674: First Scientific Observations with the Combined Array VLBA, VLA, and Arecibo*, *Astrophys. J.*, 597(2), pp. 809-822, Nov 2003 [*Times Cited: 5*]
- Momjian**, E., A.O. Petric, and C.L. Carilli, *VLBA Observations of $z > 4$ Radio-Loud Quasars*, *Astron. J.*, 127(2), pp. 587-591, Feb 2004
- Murray, N., J. Weingartner, and P. Capobianco, *On the Flux of Extrasolar Dust in Earth's Atmosphere*, *Astrophys. J.*, 600(2), pp. 804-827, Jan 2004 [*Times Cited: 1*]

- Plume, R., M.J. Kaufman, D.A. Neufeld, R.L. Snell, D.J. Hollenbach, P.F. Goldsmith, J. Howe, E.A. Bergin, G.J. Melnick, and F. Bensch, *Water Absorption from Line-of-Sight Clouds Toward W49A*, *Astrophys. J.*, 605(1), pp. 247-258, April 2004
- Roberts, M.S.E., J.W.T. Hessels, S.M. Ransom, V.M. Kaspi, P.C.C. **Freire**, F. Crawford, and D.R. Lorimer, *PSR J2021+3651: A New γ -ray Pulsar Candidate*, *Adv. Space Res.*, 33(4), pp. 577-580, Jan 2004
- Spekkens, K. J.A. Irwin, and D.J. Saikia, *HI in NGC 5433 and Its Environment: High-Latitude Emission in a Small Galaxy Group*, *MNRAS*, 352(4), pp. 1145-1160, Aug 2004
- Stanimirovic, S., J.M. Weisberg, A. Hedden, K.E. Devine, and J.T. Green, *Does Tiny-Scale Atomic Structure Exist in the Interstellar Medium?*, *Astrophys. J. Lett.*, 598(1), L23-L26, Nov 2003
[Times Cited: 4]
- Stanimirovic, S., J.M. Weisberg, A. Hedden, K. Devine, T. Green, and S.B. Anderson, *The Tiny-Scale Atomic Structure: Gas Cloudlets or Scintillation Phenomenon?*, *Astrophys. Space Sci.*, 292(1), pp. 103-109, Aug 2004
- Subrahmanyan, R. and A.A. **Desphande**, *Contaminants in ATCA Baselines with Shadowing: A Case Study of Cross Talk in Short-Spacing Interferometers*, *MNRAS*, 349(4), pp. 1365-1380, April 2004
- Taylor, G.B., D.A. Frail, E. Berger, and S.R. Kulkarni, *The Angular Size and Proper Motion of the Afterglow of GRB 030329*, *Astrophys. J.*, 609(1), pp. L1-L4, July 2004 [Times Cited: 12]
- Troland, T.H. and C. Heiles, *The Millennium Arecibo 21-cm Absorption Line Survey. III. Techniques for Spectral Polarization and Results for Stokes V.*, *Astrophys. J. Supp. Ser.*, 151(2), pp. 271-297, April 2004
- van Zee, L., E.D. Skillman, and M.P. Haynes, *Rotationally Supported Virgo Cluster Dwarf Elliptical Galaxies: Stripped Dwarf Irregular Galaxies?*, *Astron. J.*, 128(1), pp. 121-136, July 2004
- Vogt, N.P., M.P. Haynes, T. Herter, and R. Giovanelli, *M/L, H α Rotation Curves, and H I Measurements for 329 Nearby Cluster and Field Spirals. I. Data*, *Astron. J.*, 127(6), pp. 3273-3299, June 2004
- Vogt, N.P., M.P. Haynes, R. Giovanelli, and T. Herter, *M/L, H α Rotation Curves, and H I Gas Measurements for 329 Nearby Cluster and Field Spirals. II. Evidence for Galaxy Infall*, *Astron. J.*, 127(6), pp. 3300-3324, June 2004
- Vogt, N.P., M.P. Haynes, R. Giovanelli, and T. Herter, *M/L, H α Rotation Curves, and H I Gas Measurements for 329 Nearby Cluster and Field Spirals. III. Evolution in Fundamental Galaxy Parameters*, *Astron. J.*, 127(6), pp. 3325-3337, June 2004
- Weisberg, J.M., J.M.Cordes, B. Kuan, K.E. Devine, J.T. Green, and D.C. Backer, *Arecibo 430 MHz Pulsar Polarimetry: Faraday Rotation Measures and Morphological Classifications*, *Astrophys. J. Supp. Ser.*, 150(1), pp. 317-341, Jan 2004 [Times Cited: 5]

Thesis:

Van Duzer, A.M., *Blind Search for Low Mass Hales in the Local Universe*, Senior honors thesis, B.A. Physics, Univ. of South Dakota, 2004

Conference Proceedings & Abstracts:

- Backus, P.R. and Project Phoenix Team, *Project Phoenix: A Summary of SETI Observations and Results, 1995 – 2004*, American Astronomical Society Meeting 204, #75.04, May 2004
- Cabanela, J.E. and M. Roscioli, *The Effects of Environmental Density on Galaxy Properties: Extension to the Low Surface Brightness Extreme*, American Astronomical Society Meeting 203, #91.08, Dec 2003
- Camilo, F., *Searches for Young Pulsars*, in *Young Neutron Stars and Their Environments*, IAU Symp. 218, held as part of the IAU General Assembly, 14-17 July, 2003 in Sydney, Australia, Eds. F. Camilo and B.M. Gaensler, (ASP: San Francisco), p. 97, 2004
- Cordes, J.M., *NE2001: A New Model for the Galactic Electron Density and its Fluctuations*, Milky Way Surveys: The Structure and Evolution of our Galaxy, Proc. of ASP Conf. 317. The 5th Boston Univ. Astrophysics Conf. held 15-17 June, 2003 at Boston Univ. Eds. D. Clemens, R. Shah, and T. Brainerd. San Francisco: ASP, p. 211, June 2004
- Cordes, J. M., *New Radio Science Facilities for Compact Objects*, *Young Neutron Stars and Their Environments*, IAU Symp. 218, IAU General Assembly, 14-17 July 2003 in Sydney, Australia. Eds. by F. Camilo and B.M. Gaensler. San Francisco, CA: ASP, p. 113, 2004
- Demorest, P., D. Werthimer, D. Anderson, A. Golden, and R. Ekers, *A New Search for μs Time Scale Radio Pulses*, *Bioastronomy 2002: Life Among the Stars*, Proc. of IAU Symp. 213, Eds. R. Norris and F. Stootman. San Francisco: ASP, pp. 479-482, June 2004
- Dodson, R., D. Lewis, D. Legge, P. McCulloch, J. Reynolds, D. McConnell, and A. **Deshpande**, *The Vela Pulsar, The Key?* in *Young Neutron Stars and Their Environments IAU Symposia (218)*, pp. 193-194, 2004
- Freire**, P.C.C., *Eclipsing Binary Pulsars*, 2004, to appear in "Binary Pulsars" Eds. Rasio & Stairs
- Freire**, P.C.C., Y. Gupta, S.M. Ransom, and C.H. Ishwara-Chandra, *The PSR J0514-4002A Binary System in NGC 1851*, 2004, to appear in "Binary Pulsars" Eds. Rasio & Stairs
- Ghosh**, T., D.W. Kavaras, P.E. Robinson, A. Saintonge, S.T. Strasser, and C.J. **Salter**, *High Sensitivity Observations of the Satellite OH Lines of Arp 220*, American Astronomical Society Meeting 203, #115.08, Dec 2003
- Giovanelli, R., M.P. Haynes, K. Spekkens, C.M. Springob, K.L. Masters, A. Saintonge, B. Catinella, B. Kent, R.J. Maddalena, L. Magnani, and R.A. Koopmann, *Blind Extragalactic HI Surveys with the Arecibo and Green Bank Telescopes: I. Simulations and Strategies for Survey Design*, American Astronomical Society Meeting 203, #50.06, Dec 2003
- Haynes, M.P., R. Giovanelli, C.M. Springob, A. Saintonge, K. Spekkens, K.L. Masters, B. Catinella, B. Kent, R.J. Maddalena, L. Magnani, and R.A. Koopmann, *Blind Extragalactic HI Surveys with the*

- Arecibo and Green Bank Telescopes: II. Strategies for Map Construction and Signal Detection*, American Astronomical Society Meeting 203, #50.07, Dec 2003
- Heiles, C., *Observed Properties of the Diffuse HI*, in Star Formation in the Interstellar Medium: In Honor of David Hollenbach, Chris McKee and Frank Shu, ASP Conf. Proc., Vol. 323, Eds. D. Johnstone, F.C. Adams, D.N.C. Lin, D.A. Neufeld, and E.C. Ostriker, San Francisco: Astronomical Society of the Pacific, p. 79, June 2004
- Heiles, C., *Physical Properties of the Diffuse HI*, in Milky Way Surveys: The Structure and Evolution of Our Galaxy, Proc. of ASP Conf. #317, The 5th Boston University Astrophysics Conf. held 15-17 June, 2003 at Boston University, Eds. D. Clemens, R. Shah, and T. Brainerd, San Francisco: Astronomical Society of the Pacific, p. 323, June 2004
- Hessels, J.W.T., S.M. Ransom, I.H. Stairs, V.M. Kaspi, P.C.C. **Freire**, D.C. Backer, and D.R. Lorimer, *A 20-cm Search for Pulsars in Globular Clusters with Arecibo and the GBT*, Young Neutron Stars and Their Environments, IAU Symp. 218, IAU General Assembly, 14-17 July 2003 in Sydney, Australia. Eds. by F. Camilo and B.M. Gaensler. San Francisco, CA: ASP, pp. 131-132, 2004
- Joshi, B.C., M.A. McLaughlin, A.G. Lyne, M. Kramer, D.R. Lorimer, R.N. Manchester, F. Camilo, B. Burgay, A. Possenti, N. D'Amico, and P.C.C. **Freire**, *Double pulsar system J0737 3039 and its low-frequency observations with GMRT*, Bulletin of the Astronomical Society of India, 32(3), p. 191, Sept 2004
- Kang, J., and B.-C. Koo, and C. Heiles, *Faint HI 21-cm Emission Line Wings at Forbidden Velocities*, in Milky Way Surveys: The Structure and Evolution of our Galaxy, Proc. of ASP Conf. #317, The 5th Boston University Astrophysics Conf. held 15-17 June, 2003 at Boston University, Eds. D. Clemens, R. Shah, and T. Brainerd, San Francisco: Astronomical Society of the Pacific, , p. 38, June 2004
- Kramer, M., A.G. Lyne, M. Burgay, A. Possenti, R.N. Manchester, F. Camilo, M.A. McLaughlin, D.R. Lorimer, N. D'Amico, B.C. Joshi, J. Reynolds, and P.C.C. **Freire**, *The Double Pulsar - A New Testbed for Relativistic Gravity*, 2004, to appear in "Binary Pulsars" Eds. Rasio & Stairs, PASP
- Lebron**, M., *The photodissociated region around the HII region Sharpless 252*, American Astronomical Society Meeting 204, #99.01, May 2004
- Lee, J., B. Koo, M. Yun, M. Heyer, S. Stanimirovic, C. Heiles, R. Snell, and M. Burton, *A Spatio-Kinematic Study of the Shocked Gas in IC443*, 35th COSPAR Scientific Assembly, held 18 - 25 July 2004, in Paris, France, p. 3707
- Lewis**, B.M., *OH/IR Star "Death" Statistics*, Planetary Nebulae: Their Evolution And Role In The Universe IAU Symposia 209, pp. 71-72, 2003
- Lewis**, B.M., *DUSTY Simulations of the Normal Circumstellar Shell Around IRAS 19396+2338*, American Astronomical Society Meeting 203, #93.11, Dec 2003
- Lorimer, D.R., F. Camilo, P. **Freire**, M. Kramer, A.G. Lyne, R.N. Manchester, and N. D'Amico, *Millisecond Radio Pulsars in 47 Tucanae*, in Radio Pulsars, ASP Conf. Proc., Vol. 302, held 26-29 Aug 2002 at Mediterranean Agronomic Inst. of Chania, Crete, Greece, Eds. by M. Bailes, D.J. Nice and S.E. Thorsett, San Francisco: Astronomical Society of the Pacific, p. 363, 2003

- Lorimer, D.R., M. Burgay, P.C.C. **Freire**, A.G. Lyne, M. Kramer, A. Possenti, M.A. McLaughlin, F. Camilo, R.N. Manchester, N. D'Amico, and B.C. Joshi, *Two Clocks in the PSR J0737-3039 Binary System and Their Implications for the System's Origin and Evolution*, 2004, to appear in "Binary Pulsars" Eds. Rasio & Stairs
- Lorimer, D.R. and P.C.C. **Freire**, *New Limits on the Strong Equivalence Principle From Two Long-Period Circular-Orbit Binary Pulsars*, 2004, to appear in "Binary Pulsars" Eds. Rasio & Stairs
- Lorimer, D.R., *The Galactic Distribution of Radio Pulsars*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 1321
- McLaughlin, M.A., D.R. Lorimer, D.J. Champion, K. Xilouris, Z. Arzoumanian, D.C. Backer, J.M. Cordes, A.S. Fruchter, and A.N. Lommen, *New Pulsars from Arecibo Drift-Scan Searches*, Young Neutron Stars and Their Environments, IAU Symp. 218, IAU General Assembly, 14-17 July 2003 in Sydney, Australia. Eds. F. Camilo and B.M. Gaensler. San Francisco, CA: ASP, p. 127, 2004
- McLaughlin, M.A., D.R. Lorimer, D.J. Champion, Z. Arzoumanian, D.C. Backer, J.M. Cordes, A.S. Fruchter, A.N. Lommen, K.M. Xilouris, *New Binary and Millisecond Pulsars from Arecibo Drift-Scan Searches*, 2004, to appear in "Binary Pulsars" Eds. Rasio & Stairs
- Momjian**, E., C.L. Carilli, and A.O. Petric, *Sensitive VLBI Observations of the $z=4.7$ QSO BRI 1202-0725*, American Astronomical Society Meeting 204, #60.14, May 2004
- Nice, D.J., *Relativistic Measurements of Pulsar-White Dwarf Binaries: New Results from Arecibo*, Compact Binaries in the Galaxy and Beyond, Proc. of the conference held 17-22 November, 2003 in La Paz, Baja California Sur. Eds. G. Tovmassian and E. Sion. Revista Mexicana de Astronomía y Astrofísica (Serie de Conferencias) Vol. 20, IAU Colloq.194, pp. 275, July 2004
- Nice, D.J., E.M. Splaver, and I.H. Stairs, *Heavy Neutron Stars? A Status Report on Arecibo Timing of Four Pulsar - White Dwarf Systems*, Young Neutron Stars and Their Environments, IAU Symp. 218, IAU General Assembly, 14-17 July 2003 in Sydney, Australia. Eds. F. Camilo and B.M. Gaensler. San Francisco, CA: ASP, pp. 49-52, 2004
- Osten, R.A. and T.S. Bastian, *Radio Bursts on the Flare Star AD Leo from the Arecibo Observatory*, American Astronomical Society Meeting 203, #48.02, Dec 2003
- Putman, M.E., J.L. Rosenberg, E.V. Ryan-Weber, and J.T. Stocke, *Local Gaseous Filaments*, American Astronomical Society Meeting 204, #79.02, May 2004
- Pandian, J.D., P.F. Goldsmith, L. **Baker**, G. **Cortes**, R. **Ganesan**, L.S. **Wray**, N. Wadefalk, and S. Weinreb, *A New Low-Noise Broadband Receiver for Methanol Maser Studies using the Arecibo 305m Radio Telescope*, American Astronomical Society Meeting 204, #10.09, May 2004
- Porcas, R.W., W. Alef, T. **Ghosh**, C.J. **Salter**, and S.T. Garrington, *Compact Structure in FIRST Survey Sources*, Proc. of the 7th Symp. of the European VLBI Network on New Developments in VLBI Science and Technology. Held in Toledo (Spain) on Oct. 12-15 2004. Eds. R. Bachiller, F. Colomer, J.-F.; Desmurs, and P. de Vicente. (c) Observatorio Astronomico Nacional of Spain, pp. 31-34, 2004

- Ransom, S., J. Hessels, I. Stairs, V. Kaspi, P. **Freire**, and D. Backer, *A 20-cm Survey for Pulsars in Globular Clusters using the GBT and Arecibo*, 2004, to appear in "Binary Pulsars" Eds. Rasio & Stairs
- Reilly (deceased), K., C. **Salter**, and T. **Ghosh**, *Continuum mapping of an interaction Region within Loop I (the North Polar Spur in the ISM)*, American Astronomical Society Meeting 203, #110.15, Dec 2003
- Schmidt, E.G., C. Pantoja, and M. **Lebron**, *A Study of HVCs*, American Astronomical Society Meeting 203, #111.08, Dec 2003
- Shepard, M.K., J. Schlieder, M.C. **Nolan**, A.A. **Hine**, L.A.M. Benner, S.J. Ostro, and J.D. Giorgini, 2002 *CE_26*, IAU Circ., 8397, 2 (2004). Ed. Green, D. W. E., Sept 2004
- Spekkens, K. and R. Giovanelli, *Inner Halo Shapes of Dwarf Galaxies: Resolving the Cusp/Core Problem*, Int'l Astronomical Union Symp. 220, held 21 - 25 July, 2003 in Sydney, Australia. Eds: S. D. Ryder, D. J. Pisano, M. A. Walker, and K. C. Freeman. San Francisco: Astronomical Society of the Pacific, p. 371, July 2004
- Stocke, J.T., B.A. Keeney, E. **Momjian**, and C.L. Carilli, *H I and Metal Line Absorption in NGC 3067 Toward the Background Quasar 3C 232*, American Astronomical Society Meeting 204, #79.03, May 2004
- Troland, T.H., *Magnetic Fields and other Parameters of the Diffuse Galactic ISM*, The Magnetized Interstellar Medium, Proc. of the conf. held in Antalya, Turkey, Sept. 8-12, 2003, Eds. B. Uyaniker, W. Reich, and R. Wielebinski, Copernicus GmbH, Katlenburg-Lindau., pp. 105-114, Feb 2004

SOLAR SYSTEM STUDIES

Refereed Journals:

- Benner, L.A.M., M.C. **Nolan**, S.J. Ostro, J.D. Giorgini, J.L. Margot, and C. Magri, 1999 *DJ_4*, IAU Circ., 8329, 3, Ed. Green, D.W.E., April 2004
- Black, G.J., D.B. **Campbell**, L.M. Carter, and S.J. Ostro, *Radar Detection of Iapetus*, Science, 304, p. 553, April 2004
- Campbell, B.A., D.B. **Campbell**, J.F. Chandler, A.A. **Hine**, M.C. **Nolan**, and P.J. **Perillat**, *Radar Imaging of the Lunar Poles*, Nature, 426, pp. 137-138, Nov 2003
- Campbell**, D.B., G.J. Black, L.M. Carter, and S.J. Ostro, *Radar Evidence for Liquid Surfaces on Titan*, Science, 302, Issue 5644, pp. 431-434, Oct 2003 [*Times Cited: 21*]
- Carter, L.M., D.B. **Campbell**, and B.A. Campbell, *Impact Crater Related Surficial Deposits on Venus: Multipolarization Radar Observations with Arecibo*, J. Geophys. Res., 109(E6), CiteID E06009, June 2004 [*Times Cited: 2*]
- Chesley, S.R., S.J. Ostro, D. Vokrouhlicky, D. Capek, J.D. Giorgini, M.C. **Nolan**, J.L. Margot, A.A.

- Hine**, L.A.M. Benner, and A.B. Chamberlain, *Direct Detection of the Yarkovsky Effect by Radar Ranging to Asteroid 6489 Golevka*, *Science*, 302(5651), pp. 1739-1742, Dec 2003 [*Times Cited: 13*]
- Harmon**, J.K., M.C. **Nolan**, S.J. Ostro, and D.B. **Campbell**, *Radar Studies of Comet Nuclei and Grain Comae*, Comets II (Space Science Series), eds. M. Festou, H. Keller and H. Weaver, U. Arizona Press, pp. 265-279, 2004
- Howell**, E.S., Lovell, A.J., and Schloerb, F.P., *Comet C/2002 T7 (LINEAR)*, *IAU Circ.*, 8329, 2, Ed. Green, D.W.E., April 2004
- Kozlova, E.A., *The Nature of Anomalous Formations in the Polar Regions of Mercury and the Moon*, *Solar System Res.*, 38(5), pp. 335-346, Sept 2004
- Nolan**, M.C., E.S. **Howell**, and A.A. **Hine**, *2003 YT_1*, *IAU Circ.*, 8336, 3. Ed. Green, D.W.E., May 2004
- Ostro, S. J., J.D. Giorgini, L.A.M. Benner, A.A. **Hine**, M.C. **Nolan**, J.L. Margot, P.W. Chodas, and C. Veillet, *Radar Detection of Asteroid 2002 AA29*, *Icarus*, 166(2), pp. 271-275, Dec 2003
- Ostro, S.J., L.A.M. Benner, M.C. **Nolan**, C. Magri, J.D. Giorgini, D.J., Scheeres, S.B. Broschart, M. Kaasalainen, D. Vokrouhlický, S.R. Chesley, J.L. Margot, R.F. Jurgens, R. Rose, D.K. Yeomans, S. Suzuki, and E.M. de Jong, *Radar Observations of Asteroid 25143 Itokawa (1998 SF36)*, *Meteoritics & Planetary Sci.*, 39(3), pp.407-424, March 2004 [*Times Cited: 4*]
- Conference Proceedings:**
- Campbell**, D.B., G.J. Black, L.M. Carter, and S.J. Ostro, *The Surface of Titan: Arecibo Radar Observations*, American Geophysical Union, Fall Meeting 2003, abstract #P42B-08, Dec 2003
- Campbell, B.A., D.B. **Campbell**, B.R. Hawke, and P.G. Lucey, *Radar Properties of Lunar Basin Deposits*, 35th Lunar and Planetary Science Conf., March 15-19, 2004, League City, Texas, abstract no. 1659, March 2004
- Carter, L.M., D.B. **Campbell**, B.A. Campbell, and J.L. Margot, *Investigating Impact Crater Related Surficial Deposits on Venus With Arecibo Multi-Polarization Radar Images*, American Geophysical Union, Fall Meeting 2003, abstract #P31B-10, Dec 2003
- Coles, W.A., J.K. **Harmon**, B.J. Rickett, and A. **Venkataraman**, *A New Method for Studying the Solar Wind Using Radio Scintillations (IPS)*, AGU Fall Meeting 2003, abstract #SH11B-01, Dec 2003
- Ghent, R.R., D.K. Leverington, B.A. Campbell, B.R. Hawke, D.B. **Campbell**, *Properties of Lunar Crater Ejecta From New 70-cm Radar Observations*, 35th Lunar and Planetary Science Conf., March 15-19, 2004, League City, Texas, abstract no. 1679, March 2004
- Haldemann, A.F., L. Benner, B.J. Butler, L. Harcke, R.F. Jurgens, K.W. Larsen, J. Margot, S.J. Ostro, and M.A. Slade, *Recent Goldstone Solar System Radar Observations*, American Geophysical Union, Fall Meeting 2003, abstract #P42B-06, Dec 2003

Neish, C.D., M.C. **Nolan**, E.S. **Howell**, and A.S. Rivkin, *Radar Observations of Binary Asteroid 5381 Sekhmet*, American Astronomical Society Meeting 203, #134.02, Dec 2003

Nicholson, P.D., D.B. **Campbell**, R.G. French, and H.J. Salo, *Radar Observations of Wakes in Saturn's Rings*, American Astronomical Society, DDA meeting #35, #09.06, May 2004

SPACE & ATMOSPHERIC SCIENCES

Refereed Journals:

Bernhardt, P.A. and M.P. **Sulzer**, *Incoherent Scatter Measurements of Ring-Ion Beam Distributions Produced by Space Shuttle Exhaust Injections Into the Ionosphere*, J. Geophys. Res.-Space Phys., 109(A2), Art. No. A02303, Feb 2004 [*Times Cited: 1*]

Clemensha, B.R., P.P. Batista, D.M. Simonich, and I.S. Batista, *Sporadic Structures in the Atmospheric Sodium Layer*, J. Geophys. Res.-Atmos., 109(D11), Art. No. D11306, June 2004

Djuth, F.T., M.P. **Sulzer**, S.A. **González**, J.D. Mathews, J.H. Elder, and R.L. Walterscheid, *A Continuum of Gravity Waves in the Arecibo Thermosphere?*, Geophys. Res. Lett., 31(16), CiteID L16801, Aug 2004

Fejer, B.G. and J.T. Emmert, *Low-Latitude Ionospheric Disturbance Electric Field Effects During The Recovery Phase Of The 19-21 October 1998 Magnetic Storm*, J. Geophys. Res.-Space Phys., 108(A12), Art. No. 1454, Dec 2003 [*Times Cited: 2*]

Friedman, J.S., C.A. **Tepley**, S. **Raizada**, Q.H. Zhou, J. Hedin, and R. Delgado, *Potassium Doppler-Resonance Lidar for the Study of the Mesosphere and Lower Thermosphere at the Arecibo Observatory*, J. Atmos. Solar-Terr. Phys., 65(16-18), pp. 1411-1424, Nov-Dec 2003 [*Times Cited: 2*]

Gelinas, L.J., M.C. Kelley, M.P. **Sulzer**, E. Mishin, and M.J. Starks, *In Situ Observations During an HF Heating Experiment at Arecibo: Evidence for Z-Mode and Electron Cyclotron Harmonic Effects*, J. Geophys. Res.-Space Phys., 108(A10), Art. No. 1382, Oct 2003

Gondarenko, N.A., P.N. Guzdar, S.L. Ossaekow, and P.A. Bernhardt, *Linear Mode Conversion in Inhomogeneous Magnetized Plasmas During Ionospheric Modification By HF Radio Waves*, J. Geophys. Res.-Space Phys., 108(A12), Art. No. 1470, Dec 2003

González, S.A., M.P. **Sulzer**, M.J. Nicolls, and R.B. Kerr, *Solar Cycle Variability Of Nighttime Topside Helium Ion Concentrations Over Arecibo*, J. Geophys. Res., 109(A7), CiteID A07302, July 2004

Haldoupis, C., D. Pancheva, and N.J. Mitchell, *A Study of Tidal and Planetary Wave Periodicities Present in Midlatitude Sporadic E Layers*, J. Geophys. Res.-Space Physics, 109(A2), Art. No. A02302, Feb 2004 [*Times Cited: 1*]

Höffner, J. and J.S. **Friedman**, *The Mesospheric Metal Layer Topside: A Possible Connection to Meteoroids*, Atmos. Chem. Phys., 4(1), pp. 801-808, May 2004

- Hysell, D.L., M.F. Larsen, and Q.H. Zhou, *Common Volume Coherent and Incoherent Scatter Radar Observations of Mid-Latitude Sporadic E-Layers and QP Echoes*, *Annales Geophys.*, 22(9), pp. 3277-3290, Sept 2004
- Janches, D., M.C. **Nolan**, and M. **Sulzer**, *Radiant Distribution of Micrometeors Detected by the Arecibo 430MHz Dual-Beam Radar*, *Atmos. Chem. Phys.*, 4, pp. 621-626, April 2004 [*Times Cited: 1*]
- Kelley, M.C., C. Haldoupis, M.J. Nicolls, J.J. Makela, A. Belehaki, S. Shalimov, and V.K. Wong, *Case Studies of Coupling Between the E and F Regions During Unstable Sporadic-E Conditions*, *J. Geophys. Res.*, 108(A12), pp. SIA 12-1, CiteID 1447, Dec 2003
- Kuo, S.P., *On The Cascade Spectrum of Langmuir Waves Observed in Arecibo Heating Experiments*, *Physica Scripta*, 69(2), pp. 115-119, Feb 2004 [*Times Cited: 1*]
- Larsen, M.F., A.Z. Liu, C.S. Gardner, M.C. Kelley, S. Collins, J.S. **Friedman**, and J.H. Hecht, *Observations of Overtuning in the Upper Mesosphere And Lower Thermosphere*, *J. Geophys. Res.*, 109(D2), CiteID D02S04, Jan 2004
- Lobzin, V.V. and A.V. Pavlov, *Relation of the Electron Temperature to the Concentrations of the Electrons and Neutral Components in the Daytime Ionosphere Over Arecibo Station*, *Geomagnetism & Aeronomy*, 44(4), pp. 453-460, July-Aug 2004
- Murad, E. and C. Roth, *Evaporation of High Speed Sporadic Meteors*, *Atmos. Chem. & Phys.*, 4, pp. 737-740, May 2004
- Nicolls, M.J., M.C. Kelley, A.J. Coster, S.A. **González**, and J.J. Makela, *Imaging The Structure of a Large-Scale TID Using ISR And TEC Data*, *Geophys. Res. Lett.*, 31(9), CiteID L09812, 2004 [*Times Cited: 2*]
- Pandey, V.K., N.K. Sethi, and K.K. Mahajan, *Topside Electron Temperature Models For Low and High Solar Activity*, *Adv. Space Res.*, 33(6), pp. 959-962, 2004
- Raizada**, S., C.A. **Tepley**, D. **Janches**, J.S. **Friedman**, Q. Zhou, and J.D. Mathews, *Lidar Observations of Ca And K Metallic Layers From Arecibo and Comparison With Micrometeor Sporadic Activity*, *J. Atmos. Solar Terr. Phys.*, 66(6-9), 595-606, April 2004 [*Times Cited: 2*]
- Sethi, N.K., V.K. Pandey, and K.K. Mahajan, *Seasonal And Solar Activity Changes of Electron Temperature in the F-Region and Topside Ionosphere*, *Adv. Space Res.*, 33(6), pp. 970-974, 2004
- Smith, S.M., J.S. **Friedman**, S. **Raizada**, C.A. **Tepley**, J. Baumgardner, and M. Mendillo, *Evidence of Mesospheric Bore Formation From A Breaking Gravity Wave Event: Simultaneous Imaging and Lidar Measurements*, *J. Atmos. Solar Terr. Phys.*, 67, pp. 345-356, 2004
- Sojka, J.J., M. David, R.W. Schunk, J.C. Foster, and H.B. Vo, *A Modelling Study of the F-region Response to SAPS*, *J. Atmos. Solar-Terr. Phys.*, 66(5), pp. 415-423, March 2004
- Sulzer**, M.P., *Meteoroid Velocity Distribution Derived From Head Echo Data Collected At Arecibo During Regular World Day Observations*, *Atmos. Chem. & Phys.*, 4, pp. 947-954, June 2004 [*Times Cited: 1*]

- Urbina, J., E. Kudeki, S.J. Franke, and Q.H. Zhou, *Analysis of a Mid-Latitude E-Region LQP Event Observed During the Coqui 2 Campaign*, Geophys. Res. Lett, 31(14), Art. No. L14805, July 2004
[Times Cited: 1]
- Wen, C.H., J.F. Doherty, and J.D. Mathews, *Time-Frequency Radar Processing for Meteor Detection*, IEEE Trans. on Geoscience and Remote Sensing, 42(3), pp. 501-510, March 2004 [Times Cited: 1]
- Wilford, C.R., R.J. Moffett, J.M. Rees, G.J. Bailey, and S.A. **González**, *Comparison of the He⁺ Layer Observed Over Arecibo During Solar Maximum and Solar Minimum With CTIP Model Results*, J. Geophys. Res.-Space Phys., 108(A12), Art. No. 1452, Dec 2003
- Zhang, S.P., J.P. Thayer, R.G. Roble, J.E. Salah, G.G. Shepherd, L.P. Goncharenko, and Q.H. Zhou, *Latitudinal Variations of Neutral Wind Structures in the Lower Thermosphere for the March Equinox Period*, J. Atmos. Solar-Terr. Phys., 66(1), pp. 105-117, Jan 2004
- Zhou, Q.H., Y.T. Morton, J.D. Mathews, and D. **Janches**, *Aspect Sensitivity of VHF Echoes From Field Aligned Irregularities in Meteor Trails and Thin Ionization Layers*, Atmos. Chem. & Phys., 4, pp. 685-692, May 2004

Theses:

- Fernandez, J., *Interferometric Studies of Polar Mesosphere Summer Echoes over northern Scandinavia*, Ph.D. thesis, University of Nebraska-Lincoln, Lincoln, NE, 2004
- Turner, III, James S., *The New Arecibo HF Interactions Facility Antenna and Feed Structure Design*, Thesis, Master of Science, The Pennsylvania State University, Aug 2004

Conference Proceedings:

- Djuth, F.T., M.P. **Sulzer**, S.A. **González**, and J.H. Elder, *A Continuum of Gravity Waves in the Arecibo Thermosphere?*, American Geophysical Union, Fall Meeting 2003, abstract #SA12B-1097, Dec 2003
- Raizada**, S., C.A. **Tepley**, D. **Janches**, J.S. **Friedman**, Q.H. Zhou, and J.D. Mathews, *Simultaneous Observations of Neutral Ca and K Metallic Layers from Arecibo and the Possible Influence of Micrometeoroids on Sporadic Layers*, American Geophysical Union, Fall Meeting 2003, abstract #SA41C-07, Dec 2003
- Sulzer**, M.P., S.A. **González**, N. **Aponte**, and D. **Janches**, *New 430 MHz Radar Capabilities for Aeronomy at Arecibo Observatory*, American Geophysical Union, Fall Meeting 2003, abstract #SA12B-1095, Dec 2003
- Wilford**, C.R., R.J. Moffett, S.A. **González**, and S. Venkatraman, *Helium Ion Measurements From the Arecibo Incoherent Scatter Radar and the DMSP Satellites*, American Geophysical Union, Fall Meeting 2003, abstract #SA21B-0091, Dec 2003

TECHNICAL

Love, A.W., *Arecibo Observatory 40th Anniversary Celebration*, IEEE Antennas & Prop., 46(1), pp. 94-97, Feb 2004

The following papers do not introduce new Arecibo data, but do reference published Arecibo observing results.

RADIO ASTRONOMY

Kanekar, N., R. Subrahmanyam, J.N. Chengalur, and V. Safouris, *The Temperature of the Warm Neutral Medium in the Milky Way*, MNRAS, 346(4), pp. L57-L61, Dec 2003 [*Times Cited: 3*]

Mohan, R., K.S. Dwarakanath, and G.A. Srinivasan, *A High Galactic Latitude HI 21cm-line Absorption Survey using the GMRT: I. Observations and Spectra*, J. Astrophys. & Astron., 25(3-4), pp. 143-184, Sept 2004

Mohan, R., K.S. Dwarakanath, and G.A. Srinivasan, *A High Galactic Latitude HI 21cm-line Absorption Survey using the GMRT: II. Results and Interpretation*, J. Astrophys. & Astron., 25(3-4), pp. 185-202, Sept 2004 [*Times Cited: 1*]

Strasser, S. and A.R. Taylor, *1420 MHz Continuum Absorption Toward Extragalactic Sources in the Galactic Plane*, Astrophys. J., 603(2), pp. 560-568, March 2004 [*Times Cited: 2*]

SPACE & ATMOSPHERIC SCIENCES

Frolov, V.L., E.N. Sergeev, G.P. Komrakov, P. Stubbe, B. Thidé, M. Waldenvik, E. Veszelei, and T.B. Leyser, *Ponderomotive Narrow Continuum (N_c) Component in Stimulated Electromagnetic Emission Spectra*, J. Geophys. Res., 109(A7), CiteID A07304, July 2004

Lehtinen, M., B. Dantie, and T. Nygrén, *Optimal Binary Phase Codes and Sidelobe-Free Decoding Filters With Application to Incoherent Scatter Radar*, Annales Geophysicae, 22(5), pp. 1623-1632, May 2004

Lei, J., L. Liu, W. Wan, S.R. Zhang, and J.M. Holt, *A Statistical Study of Ionospheric Profile Parameters Derived From Millstone Hill Incoherent Scatter Radar Measurements*, Geophys. Res. Lett., 31(14), CiteID L14804, July 2004 [*Times Cited: 1*]

Wiens, R., S. Habtemichael, F. Andemariam, K. Welday, J. Criswick, S. Brown, and S. Sargoytchev, *Brightness Variations of the Northern 630nm Intertropical Arc and the Midnight Pressure Bulge Over Eritrea*, Annales Geophysicae, 22(9), pp.3251-3259, Sept 2004

NAIC/ARECIBO OBSERVATORY PUBLICATIONS

October 1, 2004 – September 30, 2005

This list of publications includes papers that result from NAIC support as well as from AO data.

*Bolded names are individuals who are currently scientific staff members, or were at the time of publication submission.

RADIO ASTRONOMY

Refereed Journals:

Araya, E., W.A. Baan, and P. Hofner, *Studies of Extragalactic Formaldehyde and Radio Recombination Lines*, *Astrophys. J. Supp. Ser.*, 154(2), pp. 541-552, Oct 2004

Araya, E., P. Hofner, H. Linz, M. Sewilo, C. Watson, E. Churchwell, L. Olmi, and S. Kurtz, *A Search for H₂CO 6 Centimeter Emission Toward Young Massive Stellar Objects*, *Astrophys. J. Supp. Ser.*, 154(2), pp. 579-584, Oct 2004 [*Times Cited: 1*]

Araya, E., P. Hofner, S. Kurtz, H. Linz, L. Olmi, M. Sewilo, C. Watson, and E. Churchwell, *Discovery of an H₂CO 6 Centimeter Maser in IRAS 18566+0408*, *Astrophys. J.*, 618(1), pp. 339-343, Jan 2005

Asgekar, A. and A.A. **Deshpande**, *Fluctuation Properties and Polar Emission Mapping of Pulsar B0834+06 at Decametre Wavelengths*, *MNRAS*, 357(4), pp. 1105-1112, March 2005

A. Beelen, P. Cox, J. Pety, C.L. Carilli, F. Bertoldi, E. **Momjian**, A. Omont, P. Petitjean, A.O. Petric, *Starburst Activity in the Host Galaxy of the z=2.58 Quasar J1409+5628*, 2005, to appear in *Astron. Astrophys.*

Bhat, N.D.R., J.M. Cordes, S. Chatterjee, and T.J.W. Lazio, *Radio Frequency Interference Identification and Mitigation Using Simultaneous Dual-Station Observations*, *Radio Science*, 40(5), Art. No. RS5S14, June 2005

Brüns, C., J. Kerp, L. Staveley-Smith, U. Mebold, M.E. Putman, R.F. Haynes, P.M.W. Kalberla, E. **Muller**, and M.D. Filipovic, *The Parkes HI Survey of the Magellanic System*, *Astron. Astrophys.*, 432(1), pp.45-67, March 2005 [*Times Cited: 3*]

Burgay, M., A. Possenti, R.N. Manchester, M. Kramer, M.A. McLaughlin, D.R. Lorimer, I.H. Stairs, B.C. Joshi, A.G. Lyne, F. Camilo, N. D'Amico, P.C.C. **Freire**, J.M. Sarkissian, A.W. Hotan, and G.B. Hobbs, *Long-Term Variations in the Pulse Emission from PSR J0737-3039B*, *Astrophys. J. Lett.*, 624(2), L113-L116, May 2005

Catinella, B., M.P. Haynes, and R. Giovanelli, *Rotational Widths for Use in the Tully-Fisher Relation. I. Long-Slit Spectroscopic Data*, *Astron. J.*, 130(3), pp. 1037-1048, Sept 2005

Ceccarelli, M.L., C. Valotto, D.G. Lambas, N. Padilla, R. Giovanelli, and M. Haynes, *Galaxy Peculiar Velocities and Infall Onto Groups*, *Astrophys. J.*, 622(2), pp. 853-861, April 2005

Champion, D.J., D.R. Lorimer, M.A. McLaughlin, K.M. Xilouris, Z. Arzoumanian, P.C.C. **Freire**, A.N. Lommen, J.M. Cordes, and F. Camilo, *Arecibo Timing and Single-Pulse Observations of 17 Pulsars*, 2005, to appear in *MNRAS*

- Cordes, J.M., M. Kramer, T.J.W. Lazio, B.W. Stappers, D.C. Backer, and S. Johnston, *Pulsars as Tools for Fundamental Physics & Astrophysics*, *New Astronomy Reviews*, **48**, Issue 11-12, pp. 1413-1438, Dec 2004
- Cordes, J.M., T.J.W. Lazio, and M.A. McLaughlin, *The Dynamic Radio Sky*, *New Astronomy Reviews*, **48**(11-12), pp. 1459-1472, Dec 2004
- Cordes, J.M., P. **Freire**, D. Lorimer, F. Camilo, et al., *Arecibo Pulsar Survey Using ALFA. I. Survey Strategy and First Discoveries*, submitted to *Astrophys. J.*, 2005
- Darling, J., R. Giovanelli, M.P. Haynes, A.D. Bolatto, and C. Geoffrey, *Detection of 21 Centimeter HI Absorption at $z=0.78$ in a Survey of Radio Continuum Sources*, *Astrophys. J.*, **613**(2), pp. L101-L104, Oct 2004
- Deshpande**, A.A., *Correlations of Spectral Intensity Fluctuations: Application to RFI Mitigation*, *Radio Science*, **40**(5), CiteID RS5S12, July 2005
- Freire**, P.C.C., J.W.T. Hessels, D.J. Nice, S.M. Ransom, D.R. Lorimer, and I.H. Stairs, *The Millisecond Pulsars in NGC 6760*, *Astrophys. J.*, **621**(2), pp. 959-965, March 2005
- Freire, P.C.C.**, *Solving the Mystery of Iapetus*, 2005, submitted to *J. Geophys. Res.-Planets*
- Gavazzi, G., A. Boselli, W. van Driel, and K. O'Neil, *Completing HI Observations of galaxies in the Virgo Cluster*, *Astron. Astrophys.*, **429**, pp. 439-447, Jan 2005 [*Times Cited: 2*]
- Gavazzi, G., K. O'Neil, A. Boselli, and W. van Driel, *Completing HI Observations of Galaxies: The Coma Supercluster*, 2005, *Astron. Astrophys.*, in press
- Giovanelli, R.,...P. **Perillat**,...B. **Catinella**,...E. **Momjian**, et al., *The Arecibo Legacy Fast ALFA Survey I. Science Goals, Survey Design and Strategy*, to appear in *Astron. J.*, Dec 2005.
- Giovanelli, R.,...P. **Perillat**,...B. **Catinella**,...E. **Momjian**, et al., *The Arecibo Legacy Fast ALFA Survey II. Results*, to appear in *Astron. J.*, Dec 2005.
- Goldsmith, P.F. and D. Li, *HI Narrow Self-Absorption in Dark Clouds: Correlations*, 2005, to appear in *Astrophys. J.*
- Heiles, C. and T.H. Troland, *The Millennium Arecibo 21-cm Absorption Line Survey, IV. Statistics of Magnetic Field Column Density, and Turbulence*, *Astrophys. J.*, **624**(2), pp. 773-793, May 2005 [*Times Cited: 1*]
- Heinke, C.O., J.E. Grindlay, P.D. Edmonds, H.N. Cohn, P.M. Lugger, F. Camilo, S. Bogdanov, and P.C. **Freire**, *A Deep Chandra Survey of the Globular Cluster 47 Tucanae: Catalog of Point Sources*, *Astrophys. J.*, **625**(2), pp. 796-824, June 2005
- Helmboldt, J.F., R.A.M. Walterbos, G.D. Bothun, K. O'Neil, and W.J.G. de Blok, *Star Formation in HI-Selected Galaxies. I. Sample Characteristics*, *Astrophys. J.*, **613**(2), pp. 914-932, Oct 2004 [*Times Cited: 1*]

- Herter, T., R. **Brown**, R. Giovanelli, G.J. Stacey, J. Zmuidzinas, D.P. Woody, S. Golwala, and A. Blain, *The Large Atacama Submillimeter Telescope, Astronomical Structures and Mechanisms Technology*, eds. J. Antebi and D. Lemke, Proc. of the SPIE, Vol. 5498, pp. 55-62, Oct 2004
- Hodge, J.A. and A.A. **Deshpande**, *HI Density Distribution Driven by Supernova Ejecta: A Simulation Study*, *Astrophys. J.*, submitted 2005
- Hoffman, G.L., E.E. Salpeter, and A. Hirani, *Mini High Velocity Clouds*, *Astrophys. J.*, 138(6), pp. 2932-2941, Dec 2004
- Jiménez-Esteban, F.M., L. Agudo-Mérida, D. Engels, and P. Gracia-Lario, *An Infrared Study of Galactic OH/IR Stars. I. An Optical/Near-IR Atlas of the Arecibo*, *Astron. Astrophys.*, 431(2), pp.779-791, Feb 2005
- Jiménez-Esteban, F.M., P. García-Lario, D. Engels, and J.V. Perea Calderón, *An Infrared Study of Galactic OH/IR Stars. II. The 'GLMP Sample' of Red Oxygen-Rich AGB Stars*, 2005, to appear in *Astron. Astrophys.*
- Khachikian, E., G. Ter-Kazarian, L. Sargsyan, K. Yerknapeyan, and Y. Terzian, *On Multi-Nuclei Features of Some Markarian Galaxies*, 2005, to appear in *MNRAS*
- Keeney, B.A., E. **Momjian**, J.T. Stocke, C.L. Carilli, and J. Tumlinson, *Absorption Line Study of Halo Gas in NGC 3067 Toward the Background Quasar 3C 232*, *Astrophys. J.*, 622(1), pp. 267-278, March 2005
- Koopmann, R.A., M.P. Haynes, and B. **Catinella**, *A Comparison of H α and Stellar Scale Lengths in Virgo and Field Spirals*, submitted to *Astron. J.*, 2005
- Lazio, T.J.W., J.M. Cordes, A.G. de Bruyn, and J.-P. Macquart, *The Microarcsecond Sky and Cosmic Turbulence*, *New Astron. Rev.*, 48(11-12), p. 1439-1457, Dec 2004
- Löhmer, O., W. Lewandowski, A. Wolszczan, and R. Wielebinski, *Shapiro Delay in the PSR J1640+2224 Binary System*, *Astrophys. J.*, 621(1), pp. 388-392, March 2005
- Lorimer, D.R., G.B. Hobbs, J.M. Sarkissian, N. D'Amico, F. Camilo, B.C. Joshi, and P.C.C. **Freire**, *The Mean Pulse Profile of PSR J0737-3039A*, *Astrophys. J. Lett.*, 621(1), pp. L49-L52, March 2005
- Lorimer, D.R., K.M. Xilouris, A.S. Fruchter, I.H. Stairs, F. Camilo, A.M. Vazquez, J.A. Eder, M.A. McLaughlin, M.S.E. Roberts, J.W.T. Hessels, and S.M. Ransom, *Discovery of 10 Pulsars in an Arecibo Drift-scan Survey*, *MNRAS*, 359(4), pp. 1524-1530, April 2005
- Lorimer, D.R., I. Stairs, P. Freire, J.M. Cordes, et al., *Arecibo Pulsar Survey Using ALFA. II. Discovery of a Relativistic Binary System*, in preparation for *Astrophys. J.*, 2005
- Manchester, R.N., M. Kramer, A. Possenti, A.G. Lyne, M. Burgay, I.H. Stairs, A.W. Hotan, M.A. McLaughlin, D.R. Lorimer, G.B. Hobbs, J.M. Sarkissian, N. D'Amico, F. Camilo, B.C. Joshi, and P.C.C. **Freire**, *The Mean Pulse Profile of PSR J0737-3039A*, *Astrophys. J. Lett.*, 621(1), pp. L49-L52, March 2005

- McLaughlin, M.A., A.G. Lyne, D.R. Lorimer, A. Possenti, R.N. Manchester, F. Camilo, I.H. Stairs, M. Kramer, M. Burgay, N. D’Amico, P.C.C. **Freire**, B.C. Joshi, and N.D.R. Bhat, *The Double Pulsar System J0737-3039: Modulation of A by B at Eclipse*, *Astrophys. J. Lett.*, 616(2), pp. L131-L134, Dec 2004
- Minchin, R., J. Davies, M. Disney, P. Boyce, D. Garcia, C. Jordan, V. Kilborn, R. Lang, S. Robert, S. Sabatini, and W. van Driel, *A Dark Hydrogen Cloud in the Virgo Cluster*, *Astrophys. J.*, 622(2), L21-24, March 2005
- Momjian**, E., C.L. Carilli, and A.O. Petric, *Sensitive VLBI Observations of the $z=4.7$ QSO BRI 1202-0725*, *Astron. J.*, 129(4), pp. 1809-1817, April 2005
- Muller**, E., S. Stanimirovic, E. Rosolowsky, and L. Staveley-Smith, *A Statistical Investigation of H I in the Magellanic Bridge*, *Astrophys. J.*, 616(2), pp. 845-856, Dec 2004
- Nice, D.J., E.M. Splaver, I.H. Stairs, O. Loehmer, A. Jessner, M. Kramer, and J.M. Cordes, *A 2.1 Solar Mass Pulsar Measured by Relativistic Orbital Decay*, 2005, submitted to *Astrophys. J.*
- Okoshi, K. and M. Nagashima, *Damped Ly α Absorbing Galaxies at Low Redshifts $z \leq 1$ from Hierarchical Galaxy Formation Models*, *Astrophys. J.*, 623(1), pp. 99-111, April 2005
- O’Neil, K., *New Reference Galaxy Standards for HI Emission Observations*, *Astron. J.*, 128(5), pp. 2080-2097, Nov 2004
- O’Neil, K., G. Bothun, W. van Driel, and D. Monnier Ragaigne, *A New H I Catalog of Low Surface Brightness Galaxies Out to $z = 0.1$. Tripling the Number of Massive LSB Galaxies Known*, *Astron. Astrophys.*, 428, pp. 823-835, Dec 2004
- Pihlström, Y.M., W.A. Baan, J. Darling, and H.-R. Klöckner, *High-Resolution Imaging of the OH Megamaser Emission in IRAS 12032+1707 and IRAS 14070+0525*, *Astrophys. J.*, 618(2), pp. 705-711, Jan 2005
- Pisano, D.J., D.C. Koo, C.N.A. Willmer, K.G. Noeske, and A.C. Phillips, *H I Observations of SA 68-6597: The Faintest Blue Compact Dwarf Galaxy*, *Astrophys. J.*, 630(1), pp. L25-L28, Sept 2005
- Putman, M., J. Rosenberg, J. Stocke, and McEntaffer, *The Relationship Between Baryons and Dark Matter in Extended Galaxy Halos*, 2006, *Astron. J.*, in press
- Qiao, G.J., K.J. Lee, B. Zhang, R.X. Xu, and H.G. Wang, *A Model for the Challenging “Bi-drifting” Phenomenon in PSR J0815+09*, *Astrophys. J. Lett.*, 616(2), pp. L127-L130, Dec 2004
- Ransom, S.M., J.W.T. Hessels, I.H. Stairs, P.C.C. **Freire**, F. Camilo, V.M. Kaspi, and D.L. Kaplan, *Twenty-One Millisecond Pulsars in Terzan 5 Using the Green Bank Telescope*, *Science*, 307(5711), pp. 892-896, Feb 2005
- Rosenberg, J.L., S.E. Schneider, and J. Posson-Brown, *Gas and Stars in an $<_{\text{TRANS ORIG}} = \text{“H I-Selected Galaxy Sample”}$* , *Astrophys. J.*, 129(3), pp. 1311-1330, March 2005
- Roshi, D.A., D.S. Balser, T.M. Bania, W.M. Goss, and C.G. De Pree, *An 8.5 GHz Arecibo Survey of Carbon Recombination Lines Toward Ultra-Compact/HII Regions: Physical Properties of Dense Molecular Material*, *Astrophys. J.*, 625(1), pp. 181-193, May 2005 [*Times Cited: 1*]

- Roueff, E., D.C. Lis, F.F.S. van der Tak, M. Gerin, and P.F. Goldsmith, *Interstellar Deuterated Ammonia: from NH₃ to ND₃*, *Astron. Astrophys.*, 438(2), pp. 585-598, 2005
- Sabatini, S., J. Davies, W. van Driel, M. Baes, S. Roberts, R. Smith, S. Linder, and K. O'Neil, *The Dwarf Low Surface Brightness Galaxy Population of the Virgo Cluster - II. Colours and HI Line Observations*, *MNRAS*, 357(3), pp. 819-833, March 2005
- Sewilo, M., C. Watson, E. Araya, E. Churchwell, P. Hofner, and S. Kurtz, *Resolution of Distance Ambiguities of Inner Galaxy Massive Star Formation Regions. II.*, *Astrophys. J. Supp. Ser.*, 154(2), pp. 553-578, Oct 2004
- Spekkens, K., R. Giovanelli, and M.P. Haynes, *The Cusp/Core Problem in Galactic Halos: Long-Slit Spectra for a Large Dwarf Galaxy Sample*, *Astron. J.*, 129(5), pp. 2119-2137, May 2005
- Splaver, E.M., D.J. Nice, I.H. Stairs, A.N. Lommen, and D.C. Backer, *Masses, Parallax, and Relativistic Timing of the PSR J1713+0747 Binary System*, *Astrophys. J.*, 620(1), pp. 405-415, Feb 2005
- Springob, C.M., M.P. Haynes, and R. Giovanelli, *Morphology, Environment, and the HI Mass Function*, *Astrophys. J.*, 621(1), pp. 215-226, March 2005
- Springob, C.M., M.P. Haynes, R. Giovanelli, and B.R. Kent, *A Digital Archive of HI 21 cm Line Spectra of Optically-Targeted Galaxies*, 2005, to appear in *Astrophys. J.*
- Stairs, I.H., A.J. Faulkner, A.G. Lyne, M. Kramer, D.R. Lorimer, M.A. McLaughlin, R.N. Manchester, G.B. Hobbs, F. Camilo, A. Possenti, M. Burgay, N. D'Amico, P.C. **Freire**, and P.C. Gregory, *Discovery of Three Wide-orbit Binary Pulsars: Implications for Binary Evolution and Equivalence Principles*, 2005, to appear in *Astrophys. J.*
- Stanimirovic, S. and C. Heiles, C., *The Thinnest Cold HI Clouds in the Diffuse Interstellar Medium?* *Astron. J.*, 631(1), pp.371-375, Sept 2005
- Taylor, G.B., E. **Momjian**, Y. Pihlstrom, T. **Ghosh**, and C. **Salter**, *Late Time Observations of the Afterglow and Environment of GRB030329*, *Astrophys. J.*, 622(2), pp. 986-990, April 2005 [*Times Cited: 3*]
- Valotto, C. and R. Giovanelli, *Extinction Effects in Spiral Galaxy Rotation Curves*, 2005, to appear in the *Astron. J.*
- Van Loon, J.T., S. Stanimirovic, A. Evans, and E. Muller, *Stellar Mass Loss and the Intra-Cluster Medium in Galactic Globular Clusters: A Deep Radio Survey for HI and OH*, 2005, submitted to *MNRAS*
- Vignali, C., W.N. Brandt, A. Comastri, and J. Darling, *On the X-ray Properties of OH Megamaser Sources: Chandra Snapshot Observations*, 2005, to appear in *MNRAS*
- Wilkinson, P.N., K.I. Kellermann, R.D. Ekers, J.M. Cordes, and T.J.W. Lazio, *The Exploration of the Unknown*, *New Astronomy Reviews*, 48(11-12), p. 1551-1563, Dec 2004
- Yang, T.-G. and C.-X. Zhong, *Progress on Millisecond Pulsar Timing Observations*, *Progress in Astronomy*, 23(1), pp. 1-9, May 2005

Young, K.E., J.-E. Lee, and N.J. Evans II, *Probing Pre-Protostellar Cores with Formaldehyde*, *Astrophys. J.*, 614(1), p. 252-266, Oct 2004

Theses:

Becker, K., *Courting Serendipity: The Search for Transient Radio Signals*, M.S. Thesis, Cornell University, May 2005

Carter, L.M., *Investigating Mantling Deposits on Venus and Regoliths on Asteroids Using Radar Polarimetry*, Ph.D. Thesis, Cornell University, Jan 2005

Catinella, B., *Internal Kinematics of Disk Galaxies in the Local Universe*, Ph.D. Thesis, Cornell University, Jan 2005

Masters, K.L., *Galaxy Flows In and Around the Local Supercluster*, Ph.D. Thesis, Cornell University, 2005

Splaver, E.M., *Long-Term Timing of Millisecond Pulsars*, Ph.D. Thesis, Princeton University, Dec 2004

Conference Proceedings & Abstracts:

Abell, P.A., M.J. Gaffey, and P.S. Hardersen, *Compositional Results of Binary Near-Earth Asteroid 2003 YT1: A Basaltic Achondrite*, American Astronomical Society, DPS meeting #36, #28.09, Nov 2004

Araya, E., P. Hofner, S. Kurtz, H. Linz, L. Olmi, M. Sewilo, C. Watson, and E. Churchwell, *A New Formaldehyde 6 cm Emitter in the Galaxy*, American Astronomical Society Meeting 205, #74.07, Dec 2004

Arce, H.G., GALFA, *Using ALFA to study HI and Molecular Clouds*, American Astronomical Society Meeting 205, #78.03, Dec 2004

Asplund, C.T., D.E. Berwick, D.R. Stinebring, and M.A. Walker, *Milliarcsecond Images of the Ionized ISM From Pulsar Scintillation*, American Astronomical Society Meeting 205, #139.12, Dec 2004

Bhat, R., J. Cordes, S. Chatterjee, and J. Lazio, J., *Multifrequency Observations of Giant Pulses from the Crab Nebula Pulsar*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 4069

Camilo, F. and F.A. Rasio, *Pulsars in Globular Clusters*, in ASP Conf. Ser., Vol. 328: Binary Radio Pulsars, eds. F.A. Rasio and I.H. Stairs, (ASP: San Francisco), p. 147, 2005

Catinella, B. M.P. Haynes, and R. Giovanelli, *Template Rotation Curves for Disk Galaxies*, in conf. proc. of Dynamics of Galaxies: Baryons and Dark Matter, Las Vegas, NV, March 10-12, 2005

DeCesar, M.E. and B.M. Lewis, *Preliminary Results from the Identification of 2MASS Counterparts to OH/IR Star Color Mimics*, American Astronomical Society Meeting 205, #13.07, Dec 2004

- Demorest, P., R. Ramachandran, D. Backer, R. Ferdman, I. Stairs, and D. Nice, *Precision Pulsar Timing and Gravity Waves: Recent Advances in Instrumentation*, American Astronomical Society Meeting 205, #149.01, Dec 2004
- Ferdman, R.D., I.H. Stairs, D.C. Backer, R. Ramachandran, P. Demorest, D.J. Nice, A.G. Lyne, M. Kramer, D. Lorimer, M.A. McLaughlin, D. Manchester, F. Camilo, N. D'Amico, A. Possenti, M. Burgay, B.C. Joshi, and P.C.C. **Freire**, *High-Precision Timing of Several Millisecond Pulsars*, American Astronomical Society Meeting 205, #111.01, Dec 2004
- Flores, R.M., M. **Lebron**, and A. **Deshpande**, *A Multifrequency Study of Molecular and Recombination Transitions Toward W49A*, American Astronomical Society Meeting 205, #140.12, Dec 2004
- Freire**, P. and ALFA Pulsar Consortium, *ALFA Arecibo Pulsar Surveys*, American Astronomical Society Meeting 205, #76.07, Dec 2004
- Goldston, J.E., *Optimized Mapping Modes and Algorithms for ALFA*, American Astronomical Society Meeting 205, #78.08, Dec 2004
- Haynes, M.P., R. Giovanelli, B.R. Kent, C.M. Springob, K.L. Masters, A. Saintonge, K. Spekkens, and S. Stierwalt, *A Digital Archive of Extragalactic HI Spectra and Access to the Arecibo Legacy Fast ALFA Survey*, American Astronomical Society Meeting 205, #130.08, Dec 2004
- Heiles, C., HI: Temperatures, Magnetism, Turbulence, Morphology (Panel Discussion), in *How Does the Galaxy Work? A Galactic Tertulia with Don Cox and Ron Reynolds*, Eds. E.J. Alfaro, E. Prez, and J. Franco, Astrophysics & Space Science Library, Vol. 315, Kluwer Academic Publishers, Dordrecht, The Netherlands, 2004, p. 347, Oct 2004
- Heiles, C., J. Goldston, J. Mock, A. Parsons, S. Stanimirovic, and D. Werthimer, *GALFA Hardware and Calibration Techniques*, American Astronomical Society Meeting 205, #78.07, Dec 2004
- Heinke, C.O., J.E. Grindlay, P.D. Edmonds, H.N. Cohn, P.M. Lugger, F. Camilo, S. Bogdanov, and P.C. **Freire**, *X-ray Binaries in the Globular Cluster 47 Tucanae*, 2005, to appear in conf. Proc. of 'Interacting Binaries: Accretion, Evolution & Outcomes', Cefalu, July 4-10 2004
- Hoffman, L. and E.E. Salpeter, *Smidgens of Fuel for Star Formation*, in *The Initial Mass Function 50 Years Later*, ed. E. Corbelli, F. Palla & H. Zinnecker (Springer: Dordrecht), p. 265, 2005
- Kerton, C.R., *The Physical Properties of a Cold HI Feature Observed Transitioning from Absorption to Emission*, American Astronomical Society Meeting 205, #140.01, Dec 2004
- Kinnaman, L. and M. **Lebron**, *Simulating HII Emission with a Sphere and Shell Model*, American Astronomical Society Meeting 205, #139.05, Dec 2004
- Koo, B.-C. and J.-H. Kang, *Hidden Old Supernova Remnants: Prediction and Discovery*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 3254
- Korpela, E.J., P. Demorest, E. Heien, C. Heiles, and D. Werthimer, *Latest Results of the SETHI Survey at Arecibo*, in *How Does the Galaxy Work? A Galactic Tertulia with Don Cox and Ron Reynolds*. Eds. E.J. Alfaro, E. Pérez, J. Franco, Astrophysics And Space Science Library, Vol. 315, Kluwer Academic Publishers, Dordrecht, The Netherlands, p. 97, Oct 2004

- Kramer, M., D.R. Lorimer, A.G. Lyne, M. McLaughlin, M. Burgay, N. D'Amico, A. Possenti, F. Camilo, P.C.C. **Freire**, B.C. Joshi, R.N. Manchester, J. Reynolds, J. Sarkissian, I.H. Stairs, R.D. Ferdman, *Testing GR with the Double Pulsar: Recent Results*, the 22nd Texas Symposium on Relativistic Astrophysics, Stanford University, Dec 2004
- Kratter, K.M., L.M. Carter, and D.B. Campbell, *New Arecibo Radar Observations of Quetzalpetlatl Corona and Surroundings*, American Astronomical Society, DPS meeting #36, #39.17, Nov 2004
- Larson, S.M., A.D. Grauer, E. Beshore, E. Christensen, P. Pravec, M. Kaasalainen, M.C. **Nolan**, E.S. **Howell**, A.A. **Hine**, A. Galad, B.S. Gajdos, C.L. Kornos, and D.J. Vilagi, *Physical Characteristics of the Binary PHA 2003 YTI*, American Astronomical Society, DPS meeting #36, #32.07, Nov 2004
- Levy, L., J.A. Rose, and J.H. van Gorkom, *The Effect of Cluster Environment on Galaxy Evolution in the Core Pegasus I Cluster*, American Astronomical Society Meeting 205, #119.01, Dec 2004
- Lewis**, B.M., *The Volatile OH Mainline Masers of R Leo*, American Astronomical Society Meeting 205, #12.09, Dec 2004
- Masters, K., *Cosmology in the Very Local Universe - Why Flow Models Matter*, poster presentation at the 22nd Texas Symposium on Relativistic Astrophysics, Stanford University, Dec 13-17 2004
- Momjian**, E., T. **Ghosh**, C. **Salter**, and A. **Venkataraman**, *eVLBI Observations with the 305m Arecibo Radio Telescope*, American Astronomical Society Meeting 205, #153.10, Dec 2004
- Nice, D.J., E.M. Splaver, and I.H. Stairs, *Arecibo Measurements of Pulsar-White Dwarf Binaries: Evidence for Heavy Neutron Stars*, Nov 2004, to appear in "Binary Radio Pulsars", eds. F.A. Rasio and I.H. Stairs, PASP Conf. Series
- Pandian, J.D., P.F. Goldsmith, and A.A. **Deshpande**, *Initial Results from the Arecibo Galactic Plane Methanol Maser Survey*, American Astronomical Society Meeting 205, #98.04, Dec 2004
- Pandian, J.D., *6.7 GHz Methanol Masers Discovered in an Unbiased Survey of the Galactic Plane*, poster presentation at the IAU Symp. 227, May 2005
- Pantoja, C., M. **Lebron**, and E. **Muller**, *A Sensitive Study of Absorption by Neutral Hydrogen and Molecular Material in Intermediate and High Velocity clouds*, American Astronomical Society Meeting 205, #142.15, Dec 2004
- Paragi, Z., M.A. Garrett, B. Paczynski, C. Kouveliotou, A. Szomoru, C. Reynolds, S.M. Parsley, and T. **Ghosh**, *e-VLBI Observations of SN2001em – An Off-Axis GRB Candidate*, to appear in the proc. of "Stellar End Products" conf. held in Granada, Spain, 12-15 April 2005
- Porcas, R.W., W. Alef, T. **Ghosh**, C.J. **Salter**, and S.T. Garrington, *Compact Structure in FIRST Survey Sources*, Proc. of the 7th Symp. of the European VLBI Network on New Developments in VLBI Science and Technology. Held in Toledo (Spain) on Oct. 12-15 2004. Eds. R. Bachiller, F. Colomer, J.-F.; Desmurs, and P. de Vicente. (c) Obs. Astron. Nacional of Spain, 2004, pp. 31-34
- Possenti, A., M. Burgay, N. D'Amico, A. Lyne, M. Kramer, M. McLaughlin, D. Lorimer, R. Manchester, F. Camilo, J. Sarkissian, P.C. **Freire**, and B.C. Joshi, *The Double Pulsar Binary J0737-3039: A Two-Clocks Relativistic System*, in 16th SIGRAV Conf. on General Relativity and Gravitational

- Physics, held 13-16 Sept 2004 in Vietri sul Mare, Italy, eds. G. Vilasi, G. Esposito, G. Lambiase, G. Marmo, and G. Scarpetta. AIP Conf. Proc., Vol. 751, New York: American Institute of Physics, pp.126-135, March 2005
- Putman, M.E., *ALFA and HVCs: If Jodie Foster Knew What She Could Discover Now....*, American Astronomical Society Meeting 205, #78.04, Dec 2004
- Rankin, J.M. and S.A. Suleymanova, *Q- to B-Mode Transition Recovery Dynamics in Pulsar B0943+10*, American Astronomical Society Meeting 205, #111.09, Dec 2004
- Ransom, S.M., J.W.T. Hessels, I.H. Stairs, P.C.C. **Freire**, V.M. Kaspi, F. Camilo, and D.L. Kaplan, *Hitting the Pulsar Jackpot in Terzan 5 with the GBT*, American Astronomical Society Meeting 205, #111.02, Dec 2004
- Redman, S., G. Wright, and J. Rankin, *PSR B2303+30: A Single System of Drifting Subpulses, Moding and Nulling*, American Astronomical Society Meeting 205, #111.04, Dec 2004
- Rodriguez, C. and J. Rankin, *Emission Window Shift in Pulsars B0919+06 and B1859+07*, American Astronomical Society Meeting 205, #111.06, Dec 2004
- Saucedo-McQuade, K., C. Pantoja, M. **Lebron**, and E. **Muller**, *HI Observations of High Velocity Clouds*, American Astronomical Society Meeting 205, #142.14, Dec 2004
- Scheeres, D.J., L.A.M. Benner, S.J. Ostro, A. Rossi, F. Marzari, and P. Washabaugh, *Abrupt Alteration of Asteroid 2004 MN4's Spin State During its 2029 Earth Flyby*, American Astronomical Society, DDA meeting #36, #04.02, May 2005
- Scoles, S., E. **Howell**, M. **Nolan**, and C. Magri, *Physical Modeling of Near-Earth Asteroid 2005EU2*, American Astronomical Society, DPS Meeting #37, Sept 4-9, 2005, Cambridge, England
- Spekkens, K. and R. Giovanelli, *Disk Stability and the Fastest Rotators: First Results*, American Astronomical Society Meeting 205, #60.17, Dec 2004
- Springob, C.M., *Morphological Segregation, HI Deficiency and the HI Mass and Velocity Function*, American Astronomical Society Meeting 205, #122.03, Dec 2004
- Srostlik, Z. and J.M. Rankin, *Core Component Emission as an Indicator of Moding Behavior in Pulsar B1237+25*, American Astronomical Society Meeting 205, #111.05, Dec 2004
- Stairs, I. H., M. Kramer, A.G. Lyne, M.A. McLaughlin, D.R. Lorimer, R.N. Manchester, M. Burgay, A. Possenti, N. D'Amico, P.C.C. **Freire**, B.C. Joshi, F. Camilo, and R.D. Ferdman, *The Double Pulsar and Fundamental Physics*, American Astronomical Society Meeting 206, #17.01, May 2005
- Stanimirovic, S., *GALFA, A New Era of Galactic HI Science with ALFA*, American Astronomical Society Meeting 205, #78.02, Dec. 2004
- Stanimirovic, S., J.M. Weisberg, Z. Pei, K. Tuttle, and J.T. Green, *A U-size Structure in the Cold Neutral Medium: Existence, Properties and Origin*, American Astronomical Society Meeting 205, #140.11, Dec. 2004

Taylor, A.R., *A Full-Stokes ALFA Continuum Survey*, American Astronomical Society Meeting 205, #78.05, Dec. 2004

Terzian, Y., *Arecibo Survey of Radio Recombination Lines*, American Astronomical Society Meeting 205, #78.06, Dec 2004

W.H.T. Vlemmings, S. Chatterjee, W.F. Brisken, T.J.W. Lazio, J.M. Cordes, S.E. Thorsett, W.M. Goss, E.B. Fomalont, M. Kramer, A.G. Lyne, S. Seagroves, J.M. Benson, M.M. McKinnon, D.C. Backer, and R. Dewey, *Pulsar Astrometry at the Microarcsecond Level*, to appear in the proceedings of the "Stellar End Products" workshop, 13-15 April 2005, Granada, Spain

Zahid, J., M. DeCesar, L. Kinnaman, M. Rice, K. Saucedo-McQuade, T. Ghosh, E. Momjian, and C. Salter, *Neutral Hydrogen in the Galaxy Cluster, Abell 2390*, American Astronomical Society Meeting 205, #147.20, Dec 2004

SOLAR SYSTEM STUDIES

Refereed Journals:

Benner, L.A.M., M.C. Nolan, S.J. Ostro, J.D. Giorgini, J.L. Margot, and C. Magri, *1994 XD*, IAU Circ., 8563, 2, ed. Green, D. W. E., July 2005

Benner, L.A.M., M.C. Nolan, S.J. Ostro, J.D. Giorgini, C. Magri, and J.L. Margot, *Near-Earth asteroid 2005 CR37: Radar Images of a Candidate Contact Binary*, submitted to Icarus, 2005

Campbell, B.A. and D.B. Campbell, *Surface Properties in the South Polar Region of the Moon from 70-cm Radar Polarimetry*, 2005, Icarus, in press

Campbell, B.A. and B.R. Hawke, *Radar Mapping of Lunar Cryptomaria East of Orientale Basin*, 2005, J. Geophys. Res., in press

Ghent, R.R., D.W. Leverington, B.A. Campbell, B.R. Hawke, and D.B. Campbell, *Earth-Based Observations of Radar-Dark Crater Haloes on the Moon: Implications for Regolith Properties*, J. Geophys. Res., 110(E2), CiteID E02005, Feb 2005

Harmon, J.K. and W.A. Coles, *Modeling Radio Scattering and Scintillation Observations of the Inner Solar Wind Using Oblique Alfvén/Ion Cyclotron Waves*, J. Geophys. Res., 110(A3), CiteID A03101, March 2005

Harmon, J.K. and M.C. Nolan, *Radar Observations of Comet 2P/Encke During the 2003 Apparition*, Icarus, 176(1), pp. 175-183, July 2005

Nicholson, P.D., R.G. French, D.B. Campbell, J.L. Margot, M.C. Nolan, G.J. Black, and H.J. Salo, *Radar Imaging of Saturn's Rings*, Icarus, 177(1), pp. 32-62, Sept 2005

Nolan, M.C., J.K. Harmon, E.S. Howell, D.B. Campbell, and J.L. Margot, J.L., *Detection of Large Grains in the Coma of Comet C/2001 A2 (LINEAR) from Arecibo Radar Observations*, submitted to Icarus, 2004

- Ostro, S.J., L.A.M. Benner, C. Magri, J.D. Giorgini, R. Rose, R.F. Jurgens, D.K. Yeomans, A.A. **Hine**, M.C. **Nolan**, D.J. Scheeres, S.B. Broschart, M. Kaasalainen, and J.L. Margot, *Radar Observations of Itokawa in 2004 and Improved Shape Estimation*, submitted to *Meteoritics and Planetary Science*, 2005
- Pravec, P., A.W. Harris, P. Scheirich, P. Kusnirák, L. Sarounová, C.W. Hergenrother, S. Mottola, M.D. Hicks, G. Masi, Yu.N. Krugly, V.G. Shevchenko, M.C. **Nolan**, E.S. **Howell**, M. Kaasalainen, A. Galád, P. Brown, D.R. Degraff, J.V. Lambert, W.R. Cooney, and S. Foglia, *Tumbling Asteroids*, *Icarus*, 173(1), pp. 108-131, Jan 2005
- Shepard, M.K., L.A.M. Benner, S.J. Ostro, D.B. Campbell, I.I. Shapiro, and J.F. Chandler, *Radar Detection of Near-Earth Asteroids 1915 Quetzalcoatl, 3199 Nefertiti, 3757 (1982 XB) and 4034 (1986 PA)*, *Icarus*, 172(1), pp. 170-178, Nov 2004
- Smalley, K.E., G.J. Garradd, L.A.M. Benner, M.C. **Nolan**, J.D. Giorgini, S.R. Chesley, S.J. Ostro, and D.J. Scheeres, *2004 MN_4*, *IAU Circ.*, 8477, 1, Ed. Green, D. W. E., Feb 2005
- Taylor, P.A., J.L. Margot, P.D. Nicholson, D.B. Campbell, R.F. Jurgens, S.J. Ostro, L.A.M. Benner, J.D. Giorgini, M.C. **Nolan**, E.S. **Howell**, A.A. **Hine**, C. Magri, and R.S. Hudson, *The Shape and Spin State of Asteroid 54509 (2000 PH5)*, American Astronomical Society, DPS meeting #37, #15.23, Sept 2005
- Thompson, T.W., B.A. Campbell, R.R. Ghent, B.R. Hawke, and D.W. Leverington, *Radar Probing of Planetary Regoliths: An Example from the Northern Rim of Imbrium Basin*, submitted to *J. Geophys. Res.*, 2005
- Conference Proceedings:**
- Benner, L.A.M., M.C. **Nolan**, L.M. Carter, S.J. Ostro, J.D. Giorgini, C. Magri, and J.L. Margot, J.L., *Radar Imaging of Near-Earth Asteroid 11066 Sigurd*, American Astronomical Society, DPS meeting #36, #32.29, Dec 2004
- Black, G. and D. Campbell, *Rhea's Surface: Ice Properties Measured by Radar*, American Astronomical Society, DPS meeting #36, #24.04, Nov 2004
- Campbell, B.A., D.B. Campbell, and J. Chandler, *New 70-cm Radar Mapping of the Moon*, 36th Annual Lunar and Planetary Science Conf., March 14-18, 2005, in League City, Texas, abstract no. 1385, March 2005
- Campbell, B.A., and B.R. Hawke, *Cryptomare Deposits Revealed by 70-cm Radar*, 36th Annual Lunar and Planetary Science Conf., March 14-18, 2005, in League City, Texas, abstract no. 1381, March 2005
- Campbell, D.B., L.M. Carter, B.A. Campbell, and N.J. Stacy, *Planetary Surface Properties from Radar Polarimetric Observations*, Workshop on Radar Investigations of Planetary and Terrestrial Environments, February 7-10, 2005, Houston, Texas, abstract no. 6026, Feb 2005
- Campbell, D.B., L. M. Carter, B.A. Campbell, and N.J.S. Stacy, *Planetary Surface Properties from Radar Polarimetric Observations*, Workshop on Radar Investigations of Planetary and Terrestrial Environments, February 7-10, 2005, Houston, Texas, abstract no. 6026, Feb 2005

- Carter, L.M., D.B. Campbell, and B.A. Campbell, *Physical Properties of Volcanic Deposits on Venus from Radar Polarimetry*, 36th Annual Lunar and Planetary Science Conference, March 14-18, 2005, in League City, Texas, abstract no.1, Mar 2005
- Carter, L.M., B.A. Campbell, and D.B. Campbell, *New High-Resolution Radar Mapping of the Moon*, GSA, 2005
- Chesley, S.R., S.J. Ostro, D. Vokrouhlický, J.D. Giorgini, D. Capek, L.A.M. Benner, M.C. **Nolan**, and J.L. Margot, *Direct Detection of the Yarkovsky Effect: Progress and Prognostications*, American Astronomical Society, DDA meeting #36, #02.03, May 2005
- Garrick-Bethell, I., S. Byrne, J.A. Hoffman, and M.T. Zuber, *Areas of Favorable Illumination at the Lunar Poles Calculated from Topography*, 36th Annual Lunar and Planetary Science Conf., March 14-18, 2005, in League City, Texas, abstract no. 2006, 2005
- Ghent, R.R., L.M. Carter, D.W. Leverington, and B.A. Campbell, *A Comparison of Impact-related Deposits Surrounding Craters on the Moon, Venus, and Mars*, 36th Annual Lunar and Planetary Science Conference, March 14-18, 2005, in League City, Texas, abstract no.2070, Mar 2005
- Gillis, J.J., P.G. Lucey, B.A. Campbell, and B.R. Hawke, *Clementine 2.7 um Data and 70-cm Earth-Based Radar Data Provide Additional Constraints for UV-VIS Based Estimates of TiO₂ Content for Lunar Mare Basalts*, 36th Annual Lunar and Planetary Science Conf., March 14-18, 2005, in League City, Texas, abstract no. 2254, March 2005
- Giorgini, J.D., L.A.M. Benner, M.C. **Nolan**, and S.J. Ostro, *Recent Radar Astrometry of Asteroid 2004 MN₄*, American Astronomical Society, DDA meeting #36, #02.01, May 2005
- Harmon**, J.K. and M.C. **Nolan**, *Radar Observations of Comet 2P/Encke During the 2003 Apparition*, American Astronomical Society, DPS meeting #36, #21.03, Nov 2004
- Harmon**, J.K. and W.A. Coles, *Alfvénic Turbulence Dissipation Near the Sun as Inferred From Radio Scattering Observations*, American Geophysical Union, Fall Meeting 2004, abstract #SH44A-04, Dec 2004
- Harmon**, J.K., *Earth-based Radar Observations of Mercury: Imaging Results with the Upgraded Arecibo Radar*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 853
- Howell**, E.S., A.J. Lovell, M.C. **Nolan**, and F.P. Schloerb, *Recent Observations of the 18-cm OH Lines in Bright Comets with the Arecibo ALFA Receiver*, American Astronomical Society, DPS meeting #36, #23.06, Nov 2004
- Jurgens, R.F., M.A. Slade, J. Jao, and M. Simons, *Radar Altimetry Images of Venus HENG-O Region*, American Astronomical Society, DPS meeting #36, #39.08, Nov 2004
- Larson, S.M., A.D. Grauer, E. Beshore, E. Christensen, P. Pravec, M. Kaasalainen, M.C. **Nolan**, E.S. **Howell**, A.A. **Hine**, A. Galad, B.S. Gajdos, C.L. Kornos, and D.J. Vilagi, *Physical Characteristics of the Binary PHA 2003 YT₁*, American Astronomical Society, DPS meeting #36, #32.07, Nov 2004

- Lovell, A.J., E.S. **Howell**, and F.P. Schloerb, *Observational Constraints on Excitation of the 18-cm OH Lines in Comets*, American Astronomical Society, DPS meeting #36, #23.05, Nov 2004
- Margot, J.L., *Urey Prize Lecture: Binary Minor Planets*, American Astronomical Society, DPS meeting #36, #12.02, Nov 2004
- Margot, J., S.J. Peale, R.F. Jurgens, M.A. Slade, and I.V. Holin, *Earth-based Measurements of Planetary Rotational States*, American Geophysical Union, Fall Meeting 2004, abstract #G33A-02, Dec 2004
- Nolan**, M.C., E.S. **Howell**, and G. Miranda, *Radar Images of Binary Asteroid 2003 YT1*, American Astronomical Society, DPS meeting #36, #28.08, Nov 2004
- Ostro, S. J., C. Elachi, Y. Anderson, R. Boehmer, P. Callahan, G. Hamilton, M. Janssen, W. Johnson, K. Kelleher, R. Lopes, L. Roth, S. Wall, R. West, M. Allison, R. Kirk, C. Wood, F. Posa, E. Stofan, H. Zebker, R. Lorenz, J. Lunine, G. Francescetti, G. Picardi, R. Seu, D. Muhleman, P. Encrenaz, Cassini RADAR Science, Instrument Operations, *Cassini RADAR Observations of Phoebe*, American Astronomical Society, DPS meeting #36, #04.04, Nov 2004
- Ostro, S. J., C. Elachi, Y. Anderson, R. Boehmer, P. Callahan, G. Hamilton, M. Janssen, W. Johnson, K. Kelleher, R. Lopes, L. Roth, S. Wall, R. West, M. Allison, R. Kirk, C. Wood, F. Posa, E. Stofan, H. Zebker, R. Lorenz, J. Lunine, G. Francescetti, G. Picardi, R. Seu, D. Muhleman, P. Encrenaz, *Cassini RADAR Observations of Phoebe*, American Geophysical Union, Fall Meeting 2004, abstract #P43B-05, Dec 2004
- Rice, M. and J. **Harmon**, *Radar Imaging of Mercury*, American Astronomical Society, DPS meeting #36, #39.05, Nov 2004
- Schlieder, J.E., M.K. Shepard, M. **Nolan**, L.A.M. Benner, S.J. Ostro, J.D. Giorgini, and J.L. Margot, *Radar Observations of Binary Asteroid 2002 CE26*, American Astronomical Society, DPS meeting #36, #32.30, Dec 2004
- Slade, M., J. **Harmon**, L. Harcke, and R. Jurgens, *3.5-cm Radar Observations of Polar Regions of Mercury Using Goldstone to Arecibo Configuration*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 1154
- Taylor, P.A., J.L. Margot, P.D. Nicholson, D.B. Campbell, R.F. Jurgens, S.J. Ostro, L.A.M. Benner, J.D. Giorgini, M.C. **Nolan**, E.S. **Howell**, A.A. **Hine**, and R.S. Hudson, *Properties of Horseshoe Object 2000 PH5 From Radar Observations*, American Astronomical Society, DPS meeting #36, #46.06, Nov 2004
- Taylor, P.A., J.L. Margot, P.D. Nicholson, D.B. Campbell, R.F. Jurgens, S.J. Ostro, L.A.M. Benner, J.D. Giorgini, M.C. **Nolan**, E.S. **Howell**, A.A. **Hine**, C. Magri, and R.S. Hudson, *The Shape and Spin State of Asteroid 54509 (2000 PH5)*, American Astronomical Society, DPS meeting #37, #15.23, Aug 2005
- Thompson, T.W., B.A. Campbell, B.R. Hawke, R.R. Ghent, and D.W. Leverington, *Unusual Radar Backscatter Properties Along the Northern Rim of Imbrium Basin*, 36th Annual Lunar and Planetary Science Conf., March 14-18, 2005, in League City, Texas, abstract no. 1535, March 2005

Wye, L.C., H.A. Zebker, S.J. Ostro, R.D. West, Y. Gim, M.A. Janssen, R.D. Lorenz, S. Hensley, and Cassini Radar Science Team, *Titan's Surface Observed With the Cassini RADAR Scatterometer*, American Geophysical Union, Spring Meeting 2005, abstract #P13A-03, May 2005

SPACE & ATMOSPHERIC SCIENCES

Refereed Journals:

Aponte, N., M.J. Nicolls, S.A. **González**, M.P. **Sulzer**, M.C. Kelley, E. **Robles**, and C.A. **Tepley**, *Instantaneous Electric Field Measurements and Derived Neutral Winds At Arecibo*, Geophys. Res. Lett., 32(12), Art. No. L12107, June 2005

Bishop R.L., G.D. Earle, M.F. Larsen, C.M. Swenson, C.G. Carlson, P.A. Roddy, C. Fish, and T.W. Bullett, *Sequential Observations of the Local Neutral Wind Field Structure Associated With E Region Plasma Layers*, J. Geophys. Res.-Space Phys., 110(A4), Art. No. A04309, April 2005

Boyer, E., M. Petitdidier, and P. Larzabal, *Stochastic Maximum Likelihood (SML) Parametric Estimation of Overlapped Doppler Echoes*, Annales Geophysicae, 22(11), pp. 3983-3993, Nov 2004

Dyrud, L., K. Denney, J. Urbina, D. Janches, E. Kudecki, and S. Franke, *The Meteor Flux: It Depends How You Look*, Earth, Moon and Planets, 2005, in press

Fernández, J.R., R.D. Palmer, P.B. Chilson, I. Häggström, and M.T. Rietveld, *Range Imaging Observations of PMSE Using the EISCAT VHF Radar: Phase Calibration and First Results*, Ann. Geophys., 23, pp. 207-220, Jan. 2005

Fernández, J.R., N. **Aponte**, and M.P. **Sulzer**, *Retrieve of ISR Spectrum Parameters Using Genetic Algorithms*, Geophys. Res. Lett, in press, 2005

Friedman, J. S., and J. Höffner, *The Mesospheric Metal Layer Topside: A Direct Measure of Meteoric Input?*, Geophysical Res. Abstracts, 7, 02,063, sRef-ID:1607-7962/gra/EGU05-A-02063, 2005.

Friedman, J.S. and D. Janches, *Special Issue on Meteors and the Mesopause*, J. Atmos. Solar Terr. Phys., 67, pp. 1157-1158, 2005

Goncharenko, L.P., J.E. Salah, A. van Eyken, V. Howells, J.P. Thayer, V.I. Taran, B. Shpynev, Q. Zhou, and J. Chau, *Observations of the April 2002 Geomagnetic Storm by the Global Network of Incoherent Scatter Radars*, Annales Geophysicae, 23(1), pp. 163-181, Jan 2005

González, S.A., M.P. **Sulzer**, and N. **Aponte**, *An Energy Balance Studies of the Lower Topside Ionosphere Using the Arecibo ISR and Heating Facilities*, J. Geophys. Res., in press, 2005

Höffner, J. and J.S. **Friedman**, *The Mesospheric Metal Layer Topside: Examples of Simultaneous Metal Observations*, 2005, to appear in J. Atmos. Solar Terr. Phys.

Janches, D. and J.L. Chau, *Observed Diurnal and Seasonal Behavior of the Micrometeor Flux Using the Arecibo and Jicamarca Radars*, J. Atmos. Solar Terr. Phys., 67, pp. 1196-1210, 2005

- Janches, D. and D.O. ReVelle, *Initial Altitude of the Micrometeor Phenomenon: Comparison Between Arecibo Radar Observations and Theory*, J. Geophys. Res.-Space Physics, 110(A8), Art. No. A80307, Aug 2005
- Kafando, P. and M. Petitdidier, *An Attempt to Calibrate the UHF Strato-Tropospheric Radar at Arecibo Using NexRad Radar and Disdrometer Data*, Annales Geophysicae, 22(12), pp. 4025-4034, Dec 2004
- Kagan, L.M., M.J. Nicolls, M.C. Kelley, H.C. Carlson, V.V. Belikovitch, N.V. Bakhmet'eva, G.P. Komrakov, T.S. Trondsen, and E. Donovan, *Observation of Radio-Wave-Induced Red Hydroxyl Emission at Low Altitude in the Ionosphere*, Physical Review Lett., 94(9), 095,004+, 2005
- Kelley, M.C., W.E. Swartz, and J.J. Makela, *Mid-Latitude Ionospheric Fluctuation Spectra Due to Secondary $E \times B$ Instabilities*, J. Atmos. Solar-Terres. Phys., 66(17), pp. 1559-1565, Nov 2004
- Kuo, S.P. and M.C. Lee, *Cascade Spectrum of HF Enhanced Plasma Lines Generated in HF Heating Experiments*, J. Geophys. Res., 110(A1), CiteID A01309, Jan 2005
- Nicolls, M.J., and M.C. Kelley, *Strong Evidence for Gravity Wave Seeding of an Ionospheric Plasma Instability*, Geophys. Res. Lett., 32(5), CiteID L05108, March 2005
- Nicolls, M.J., M.C. Kelley, and E. Erdogan, *Small-Scale Structure on the Poleward Edge of a Stable Auroral Red Arc*, IEEE Trans. Plasma Sci., 33, p. 412, 2005 [Times Cited: 1]
- Petitdidier, M., and P. Laroche, *Lightning Observations with the Strato-Tropospheric UHF and VHF Radars at Arecibo, Puerto Rico*, Atmos. Res., 76(1-4) [Special Issue], p. 481-492, July 2005
- Roper, R.G. and J.W. Brosnahan, *Diurnal Variations in the Rate of Dissipation of Turbulent Energy in the Equatorial Upper Mesosphere-Lower Thermosphere*, Radio Science, 40(4), Art. No. RS4010 Aug 2005
- Rosado-Román, J.M., W.E. Swartz, and D.T. Farley, *Plasma Instabilities Observed in the E Region Over Arecibo and a Proposed Nonlocal Theory*, J. Atmos. Solar-Terres. Phys., 66(17) pp. 1593-1602, Nov 2004
- Smith, S.M., J. **Friedman**, S. **Raizada**, C. **Tepley**, J. Baumgardner, and M. Mendillo, *Evidence of Mesospheric Bore Formation from a Breaking Gravity Wave Event: Simultaneous Imaging and Lidar Measurements*, J. Atmos. Solar-Terres. Phys., 67(4), pp. 345-356, March 2005
- Sulzer**, M.P., N. **Aponte**, and S.A. **González**, *Application of Linear Regularization Methods to Arecibo Vector Velocities*, J. Geophys. Res., in press, 2005
- Vlasov, M.N., M.J. Nicolls, M.C. Kelley, S.M. Smith, N. **Aponte**, and S.A. **González**, *Modeling of Airglow and Ionospheric Parameters at Arecibo During Quiet and Disturbed Periods in October 2002*, J. Geophys. Res., 110(A7), Art. No. A07303, July 2005
- Waldrop, L.S., S.A. **González**, R.B. Kerr, M.P. **Sulzer**, J. Noto, F. Kamalabadi, *Generation of Metastable Helium and the 1083 nm Emission in the Upper Thermosphere*, J. Geophys. Res.-Space Physics, 110(A8), Art. No. A08304, Aug 2005

Waldrop, L.S., S.A. **González**, R.B. Kerr, M.P. **Sulzer**, E. Kudeki, and F. Kamalabadi, *Neutral Oxygen Density Derived Under Charge Exchange Equilibrium in the Topside Ionosphere*, J. Geophys. Res., in press, 2005

Wen, C.-H., J.F. Doherty, J.D. Mathews, and D. Janches, *Meteor Detection and Non-Periodic Bursty Interference Removal for Arecibo Data*, J. Atmos. Solar-Terres. Phys., **67**(3), pp. 275-281, Feb 2005

Zhou, Q.H. and Y.T. Morton, *Incoherent Scatter Radar Study of Photochemistry in the E-Region*, Geophys. Res. Lett., **32**(1), CiteID L01103, Jan 2005

Conference Proceedings & Abstracts:

Alonso, J., M. Ramos, and S. **González**, *The Arecibo Geoscience Diversity Program: A Research Experience for Hispanics*, American Geophysical Union, Fall Meeting 2004, abstract #ED22A-03, Dec 2004

Aponte, N., M.P. **Sulzer**, M.J. Nicolls, A.N. Bhatt, E.A. Gerken, M. Vlasov, V.K. Wong, R. Nikoukar, E.T. Adamson, W.A. Bristow, and S.A. **González**, *Recent Incoherent Scatter Radar Experiments and Results at Arecibo*, American Geophysical Union, Fall Meeting 2004, abstract #SA31A-1106, Dec 2004

Bishop, R.L., P.R. Straus, M. Nicolls, and M. Kelley, *Comparison and Validation of Ionospheric GPS Occultation Measurements With Arecibo ISR Data*, American Geophysical Union, Fall Meeting 2004, abstract #SF53A-0721, Dec 2004

Bishop, R.L., N. **Aponte**, D. Livneh, J. Mathews, M. **Sulzer**, G. Earle, T. Bullett, and P. Straus, *An Investigation of Possible Coupling Between the Passage of a Tropical Storm and the Local Ionosphere*, American Geophysical Union, Spring Meeting 2005, abstract #SA23B-06, May 2005

Cotts, B.R. and U.S. Inan, *Short range VLF sky wave observations of lightning-induced ionospheric effects*, American Geophysical Union, Fall Meeting 2004, abstract #SA31A-1116, Dec 2004

Eccles, V., J.J. Sojka, S.A. **González**, T.J. Fuller-Rowell, and M. Howsden, *Investigation of the Accuracy of Ionospheric Models at Mid-Latitudes: Examining Ionospheric Metrics*, American Geophysical Union, Fall Meeting 2004, abstract #SA51B-0255, Dec 2004

Makela, J.J., M.C. Kelley, J.D. Mathews, P.M. Kintner, P.M., N. **Aponte**, B.M. Ledvina, M.J. Nicolls, and I. Seker, *Steep Electron Density Gradients in the Midlatitude Nighttime Ionosphere: Current Understanding and Future Directions*, American Geophysical Union, Fall Meeting 2004, abstract #SA11B-03, Dec 2004

Mathews, J., S. Briczinski, D. Meisel, Q. Zhou, and D. Janches, *Arecibo Radar Micrometeor Studies: Interplanetary Dust in the Solar System and the Atmospheric Fate of this Dust*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 3878

Namgaladze, A., The Uam-Isr Team, *Modelling of the Ionosphere/Thermosphere Behaviour During the April 2002 Magnetic Storms: A Comparison of the UAM Results with the NRLMSISE-00 and ISR Data*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 2935

- Raizada, S., C.A. Tepley, J. Friedman, N. Aponte, S. González, and M. Sulzer**, *Characteristics of the Mesospheric Layers Observed Using Resonance Lidars from Arecibo*, American Geophysical Union, Fall Meeting 2004, abstract #SA31A-1111, Dec 2004
- Scherliess, L., R.W. Schunk, J.J. Sojka, D.C. Thompson, and L. Zhu, *Comparison of the USU GAIM Ionospheric Plasma Densities with Arecibo ISR Observations*, American Geophysical Union, Spring Meeting 2005, abstract #SA23A-11, May 2005
- Sulzer, M.P. and S.A. González**, *Comparisons of Measurements at Arecibo of the Gyro Line of Incoherent Scatter with the Theory*, American Geophysical Union, Fall Meeting 2004, abstract #SA41A-1037, Dec 2004
- Tepley, C.A., J.S. Friedman, S. Raizada, and R. Garcia**, *Initial Wind Measurements of the Upper Mesosphere via Na Lidar at Arecibo*, American Geophysical Union, Spring Meeting 2005, abstract #SA43A-12, May 2005
- Waldrop, L., R. Kerr, S. **González**, and J. Noto, *Generation of Metastable Helium and the 1083nm Emission in the Upper Thermosphere*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 4060
- Zhang, S., J.M. Holt, T. van Eyken, M. McCreedy, C. Amory-Mazaudier, S. Fukao, and M. **Sulzer**, *Ionospheric Climatology and Model from Long-Term Databases of Worldwide Incoherent Scatter Radars*, American Geophysical Union, Spring Meeting 2005, abstract #SA52A-03, May 2005
- Zhou, Q.N., J.D. Mathews, and Q.H. Zhou, *A Survey of Peak Electron Concentration Gradients in the F-Region Over Arecibo*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 2350.
- Zhou, Q., J. Friedman, N. Aponte, M. Sulzer, S. Raizada, C. Tepley, S. **González**, and Y. Morton, *Incoherent Scatter Radar and Optical Observations of the Mesosphere and Lower Thermosphere at Arecibo*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 1591
- Zhou, Q. and Y. Morton, *Electric Field Penetration to the E-Region During Geomagnetic Storms*, 35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, France, p. 1571

The following papers do not introduce new Arecibo data, but do reference published Arecibo observing results.

SPACE & ATMOSPHERIC SCIENCES

Grydeland, T., J.L. Chau, C. La Hoz, and A. Brekke, *An Imaging Interferometry Capability for the EISCAT Svalbard Radar*, *Annales Geophysicae*, 23(1), pp. 221-230, Jan 2005

Janches, D., S.E. Palo, E.M. Lau, S.K. Avery, J.P. Avery, S. de la Peña, and N.A. Makarov, *Diurnal and Seasonal Variability of the Meteoric Flux at the South Pole Measured With Radars*, *Geophys. Res. Lett.*, 31(20), CiteID L20807, Oct 2004 [*Times Cited: 1*]

Roddy, P.A., G.D. Earle, C.M. Swenson, C.G. Carlson, and T.W. Bullett, *Relative Concentrations of Molecular and Metallic Ions in Midlatitude Intermediate and Sporadic-E Layers*, *Geophys. Res. Lett.*, 31(19), CiteID L19807, Oct 2004 [*Times Cited: 2*]

Su, S.Y., C.K. Chao, H.C. Yeh, and R.A. Heelis, *Seasonal and Latitudinal Distributions of the Dominant Light Ions at 600 km Topside Ionosphere from 1999 to 2002*, *J. Geophys. Res.*, 110(A1), CiteID A01302, Jan 2005