

JOHN P. HUGHES

Professional History

- 2011 – Professor II, Rutgers University
2005 – 2011 Professor I, Rutgers University
2000 – 2005 Associate Professor, Rutgers University
1996 – 2000 Assistant Professor, Department of Physics and Astronomy,
Rutgers University, New Brunswick, NJ
1988 – 1996 Staff Scientist, Harvard-Smithsonian Center for Astrophysics,
Cambridge, MA
1984 – 1987 Postdoctoral Fellow, Harvard-Smithsonian Center for Astrophysics,
Cambridge, MA

Education

- 1984 Columbia University, Ph.D., Physics
1980 Columbia University, M.A., Physics
1978 Columbia College, A.B., Physics

Awards and Appointments

- 2010 Elected member, Executive committee of the High Energy
Astrophysics Division of the American Astronomical Society
2009 Rutgers University Board of Trustees Award for
Excellence in Research
2008 Fellow, American Physical Society
2006 – 2007 Visiting Fellow, Department of Astrophysical Sciences,
Princeton University
1999 – 2000 Visiting Scientist, Service d’Astrophysique, CEA-Saclay
1993 NASA Public Service Medal
1993 Visiting Research Scientist, Kyoto University, Japan
1992 NASA Group Achievement Award for *AXAF* VETA
1992 Smithsonian Institution Special Achievement Award
1991 NASA Group Achievement Award for *ROSAT*
1985 Japanese Foreign Research Fellow, The Institute of Space
and Astronautical Science, Tokyo, Japan
1984 – 1996 Associate, Harvard College Observatory
1984 – 1987 Smithsonian Postdoctoral Fellow
1978 – 1980 Columbia University Faculty Fellow
1977 Summer Research Assistant, Bell Labs, Murray Hill, NJ

Professional Activities (current)

- 2011 Chair, Rutgers SALT TAC
2011 Member, Nominating committee of the APS DAP
since 2009 Co-Investigator on ACTPol, NSF funded (2010-2015)
since 2009 Member, NASA Astrophysics Subcommittee
since 2009 Selected member, *Astro-H* International Science Working Group

since 2008	Proposal review, Canadian NSERC
since 2008	Member, Editorial Board “Advances in Astronomy”
since 2005	Member, <i>Suzaku</i> Steering Committee
since 2005	Member, <i>Suzaku</i> Users’ Committee
since 2005	Guiding Board Member, Atacama Cosmology Telescope (ACT) & ACTPol
since 2005	Proposal review, US-Israel Binational Science Foundation
since 2004	Proposal review, Swiss National Science Foundation
since 2003	Member, Deep Lens Survey project team
since 2001	Referee, Italian Space Agency
since 2000	P.I., <i>XMM-Newton</i> General Observer program, 15 investigations
since 1998	P.I., <i>Chandra</i> General Observer program, 20 investigations
since 1990	Referee, <i>Ap. J.</i> , <i>M.N.R.A.S</i> , <i>Astr. & Ap.</i> , <i>Nature</i> , <i>A. J.</i> , <i>P.A.S.J.</i> , <i>Advances in Space Research</i> , <i>P.N.A.S.</i>
since 1986	Visiting Astronomer, CTIO, La Serena, Chile

Professional Activities (past)

2008 – 2011	<i>International X-Ray Observatory</i> science definition team member
2007 – 2010	Rutgers representative on SALT science working group
2007	Member, International Scientific organizing committee for “The <i>Suzaku</i> X-Ray Universe” conference, San Diego, CA
2006	Referee and chair, <i>Chandra</i> Fellows Selection Committee
2006	Member, International Scientific organizing committee for “The Extreme Universe in the <i>Suzaku</i> Era” conference, Kyoto, Japan
2005	Referee, ESA <i>XMM-Newton</i> AO-5 program review
2004 – 2006	Collaborator, <i>Generation-X</i> mission concept study team
2004 – 2005	Member, NASA “Structure and Evolution of the Universe” (SEU) Advisory Committee
2004 – 2005	Member, International Scientific organizing committee for “The X-ray Universe 2005” conference, El Escorial, Spain
2004 – 2005	Member, NASA “Universe” Legacy Roadmap team
2003 – 2005	Member, Study team for the workshop “Physics of SNRs in the <i>Chandra</i> , <i>XMM-Newton</i> and INTEGRAL Era” International Space Science Institute (Bern, Switzerland)
2003	Member, NASA/MSFC Independent Implementation Review of the <i>Chandra X-ray Observatory</i>
2003	Member, Scientific organizing committee for the “1st Constellation-X Spectroscopy Workshop,” New York, NY
2002	Referee, ESA <i>XMM-Newton</i> AO-2 program review
2001	Referee, <i>Chandra</i> Fellows Selection Committee
2001	Referee, NASA <i>Chandra</i> AO-3 program review
2001	Member, Scientific organizing committee for the workshop “Neutron Stars in Supernova Remnants (II),” Boston, MA
2000 – 2004	Member and chair (2002–2004), <i>Chandra</i> Users’ Committee
2000 – 2002	Member, International advisory committee for the seventh “Nuclei in the Cosmos” symposium

2000	Referee, NASA SMEX program review
1999 – 2000	Member (ex officio), US <i>Astro-E</i> Users' Committee
1999	Referee, ESA <i>XMM-Newton</i> AO-1 program review
1999	Proposal reviewer for the National Science Foundation
1999	Represented the Committee on International Space Programs at the European Science Foundation meeting (November), Granada, Spain
1998 – 2001	Member, Committee on International Space Programs, Space Studies Board, National Research Council
1998	Referee and panel chair, NASA <i>AXAF</i> AO-1 Program Review
1997 – 2008	<i>Constellation-X Facility</i> science team member and chair of supernova remnant science panel
1997	Member, Scientific organizing committee for the “ <i>ASCA</i> Cherry Blossom Workshop,” Washington, DC
1996	Member, Scientific organizing committee for the conference “X-ray Imaging and Spectroscopy of Cosmic Hot Plasmas,” Tokyo, Japan
1996 – 2002	P.I., NASA Long Term Space Astrophysics grant
1995 – 2005	<i>Astro-E</i> and <i>Astro-E2</i> international science working group member and co-chair of galactic diffuse emission science panel
1995	Member, Nominating committee of the APS DAP
1995	Member, Scientific organizing committee for the workshop “Rates, Codes and Astrophysics,” Cambridge, MA
1995	Advisor, SAO summer intern program
1994 – 1997	Member, High Throughput X-Ray Spectroscopy (HTXS) science study team (a NASA New Mission Concept study)
1994	Referee and panel chair, NASA <i>ASCA</i> AO-3 Program Review
1993 – 1998	P.I., <i>ASCA</i> Guest Observer program, 18 investigations
1993	P.I., NSF Japan Program long-term visit
1992 – 1995	Member, NASA HEAMOWG
1991 – 1995	Chair, US <i>Astro-D</i> Users' Committee
1991 – 1996	Visiting Astronomer, Whipple Observatory
1991 – 1998	P.I., <i>ROSAT</i> Guest Observer program, 19 investigations
1990	P.I., SI International exchange program grant
1989 – 1996	Visiting Astronomer, Multiple Mirror Telescope
1989, 1990	Visiting Astronomer, ESO, La Silla, Chile
1989 – 1991	Research project supervisor in Astronomy 98 and 99, Harvard University
1988	Referee, NASA <i>Ginga</i> Visiting investigator program review
1988, 1990	Referee, NASA ADP review
1988 – 1993	NSF Japanese language fellowship
1987 – 1994	P.I., NASA <i>Ginga</i> Visiting investigator program, 4 investigations
1987 – 1989	P.I., NASA Astrophysics Data Program (ADP), 2 investigations
1982 – 1983	Instructor, New York Institute of Technology, New York, NY

Grant Funding

2005 –	NSF PIRE program	1 grant	\$622,855
2005 –	<i>Suzaku</i> GO program	2 grants	\$228,617

2000 –	<i>Chandra</i> GO program	22 grants	\$1,430,377
2000 –	<i>XMM-Newton</i> GO program	15 grants	\$612,682
1997 –	<i>HST</i> GO program	3 grants	\$114,042
1996 – 2008	NASA LTSA program	2 grants	\$1,226,856
1993 – 1999	<i>ASCA</i> GO program	5 grants	\$173,271
1990 – 1999	<i>ROSAT</i> GO program	7 grants	\$213,757
1988 – 1993	NSF Japan program	3 grants	\$49,949
1987 – 1992	<i>Ginga</i> GO program	4 grants	\$240,231
1987 –	NASA ADP program	3 grants	\$228,347

Professional Societies

American Physical Society
 American Astronomical Society
 International Astronomical Union

Research Interests

Multiwavelength studies of supernova remnants (SNRs)
 Hydrodynamical models for SNR evolution
 Nonequilibrium ionization in SNR X-ray spectra
 Observational constraints on nucleosynthesis
 Mass determination in clusters of galaxies
 Sunyaev-Zel'dovich effect in clusters of galaxies
 Gravitational lensing

Refereed Publications

- 1 “A Solar Flare X-Ray Polarimeter for the Space Shuttle,” J. R. Lemen, G. A. Chanan, J. P. Hughes, M. R. Laser, R. Novick, I. T. Rockwager, M. Sackson, and L. J. Tramiel, *Solar Physics*, **80**, 333–349 (1982).
- 2 “A Search for X-Ray Polarization from Cosmic X-Ray Sources,” J. P. Hughes, K. S. Long, and R. Novick, *The Astrophysical Journal*, **280**, 255–258 (1984).
- 3 “Interpretation of the Number Versus Diameter Distribution for the Supernova Remnants in the Large Magellanic Cloud,” J. P. Hughes, D. J. Helfand, and S. M. Kahn, *The Astrophysical Journal Letters*, **281**, L25–L28 (1984).
- 4 “Self-Consistent Models for the X-Ray Emission from Supernova Remnants: An Application to Kepler’s Remnant,” J. P. Hughes and D. J. Helfand, *The Astrophysical Journal*, **291**, 544–560 (1985).
- 5 “X-Ray Studies of the Supernova Remnant N132D: (I) Morphology,” J. P. Hughes, *The Astrophysical Journal*, **314**, 103–110 (1987).
- 6 “A Redetermination of the X-Ray Spectrum of SN1006 and Excess Diffuse Emission from the Lupus Region,” K. Koyama, H. Tsunemi, R. H. Becker, and J. P. Hughes, *Publ. Astron. Soc. Japan*, **39**, 437–445 (1987).
- 7 “Isothermality of the Gas in the Coma Cluster,” J. P. Hughes, K. Yamashita, Y. Okumura, H. Tsunemi, and M. Matsuoka, *The Astrophysical Journal*, **327**, 615–626 (1988).
- 8 “Measurements of the Gas Temperature and Iron Abundance Distribution in the Coma Cluster,” J. P. Hughes, P. Gorenstein, and D. Fabricant, *The Astrophysical Journal*, **329**, 82–96 (1988).
- 9 “Tenma Observations of the X-Ray Spectra of the Coma, Ophiuchus, and Perseus Clusters of Galaxies,” Y. Okumura, H. Tsunemi, K. Yamashita, M. Matsuoka, K. Koyama, S. Hayakawa, K. Masai, and J. P. Hughes, *Publ. Astron. Soc. Japan*, **40**, 639–652 (1988).
- 10 “A Second Supernova Inside Puppis A,” P. F. Winkler, R. P. Kirshner, J. P. Hughes, and S. Heathcote, *Nature*, **337**, 48–50 (1989).
- 11 “The Mass of the Coma Cluster: Combined X-Ray and Optical Results,” J. P. Hughes, *The Astrophysical Journal*, **337**, 21–33 (1989).
- 12 “A Measurement of the Value of the Hubble Constant from the X-Ray Properties and the Sunyaev-Zel’dovich Effect of Abell 665,” M. Birkinshaw, J. P. Hughes, and K. A. Arnaud, *The Astrophysical Journal*, **379**, 466–481 (1991).
- 13 “A2163: an Exceptionally Hot Cluster of Galaxies,” M. Arnaud, J. P. Hughes, W. Forman, C. Jones, M. Lachieze-Rey, K. Yamashita, and I. Hatsukade, *The Astrophysical Journal*, **390**, 345–349 (1992).
- 14 “Semi-Empirical Limits on the Thermal Conductivity of Intracluster Gas,” L. P. David, J. P. Hughes, and W. H. Tucker, *The Astrophysical Journal*, **394**, 452–458 (1992).

- 15 “The X-Ray Spectrum of Abell 665,” J. P. Hughes and Y. Tanaka, *The Astrophysical Journal*, **398**, 62–68 (1992).
- 16 “*Ginga* Observations of the Coma Cluster and Studies of the Spatial Distribution of Iron,” J. P. Hughes, J. A. Butcher, G. C. Stewart, and Y. Tanaka, *The Astrophysical Journal*, **404**, 611–619 (1993).
- 17 “The Insignificance of Heating Flows in Cooling Flow Clusters of Galaxies,” C. R. Canizares, T. H. Markert, S. Markoff, and J. P. Hughes, *The Astrophysical Journal Letters*, **405**, L17–L20 (1993).
- 18 “High-Resolution X-Ray Spectroscopy of the Supernova Remnant N132D,” U. Hwang, J. P. Hughes, C. R. Canizares, and T. H. Markert, *The Astrophysical Journal*, **414**, 219–229 (1993).
- 19 “A Measurement of the Hubble Constant from the X-Ray Properties and the Sunyaev-Zel’dovich Effect of Abell 2218,” M. Birkinshaw and J. P. Hughes, *The Astrophysical Journal*, **420**, 33–43 (1994).
- 20 “Detection of X-rays from SN1987A with *ROSAT*,” P. Gorenstein, J. P. Hughes, and W. H. Tucker, *The Astrophysical Journal Letters*, **420**, L25–L28 (1994).
- 21 “Elemental Abundances of the Supernova Remnant G292.0+1.8: Evidence for a Massive Progenitor,” J. P. Hughes and K. P. Singh, *The Astrophysical Journal*, **422**, 126–135 (1994).
- 22 “Discovery of Be/X-ray Stars in Two Supernova Remnants in the Small Magellanic Cloud,” J. P. Hughes and R. C. Smith, *The Astronomical Journal*, **107**, 1363–1370 (1994).
- 23 “A New Transient Pulsar in the Small Magellanic Cloud with an Unusual X-ray Spectrum,” J. P. Hughes, *The Astrophysical Journal Letters*, **427**, L25–L28 (1994).
- 24 “X-Ray Spectroscopy of SNR E0102–72 with the *ASCA* Satellite,” I. Hayashi, K. Koyama, M. Ozaki, E. Miyata, H. Tsunemi, J. P. Hughes, and R. Petre, *Publ. Astron. Soc. Japan*, **46**, L121–L124 (1994).
- 25 “Non-Polytropic Model for the Coma Cluster,” R. Fusco-Femiano, and J. P. Hughes, *The Astrophysical Journal*, **429**, 545–553 (1994).
- 26 “Abundance Gradients in Cooling Flow Clusters: *Ginga* LAC & *Einstein* SSS Spectra of A496, A1795, A2142 & A2199,” R. E. White, III, C. S. R. Day, I. Hatsukade, and J. P. Hughes, *The Astrophysical Journal*, **433**, 583–601 (1994).
- 27 “Evidence for Elemental Variation in the Ejecta of the Tycho Supernova Remnant,” O. Vancura, P. Gorenstein, and J. P. Hughes, *The Astrophysical Journal*, **441**, 680–688 (1995).
- 28 “*ASCA* Observations of the Large Magellanic Cloud Supernova Remnant Sample: Typing Supernovae from Their Remnants,” J. P. Hughes, I. Hayashi, D. J. Helfand, U. Hwang, M. Itoh, R. P. Kirshner, K. Koyama, T. H. Markert, H. Tsunemi, and J. Woo, *The Astrophysical Journal Letters*, **444**, L81–L84 (1995).
- 29 “A New X-ray–Discovered Cluster of Galaxies Associated with CL0016+16,” J. P. Hughes, M. Birkinshaw, and J. P. Huchra, *The Astrophysical Journal Letters*, **448**, L93–L96 (1995).

- 30 “Discovery of an X-ray Synchrotron Nebula Associated with the Radio Pulsar PSR B1853+01 in the Supernova Remnant W44,” I. Harrus, J. P. Hughes, and D. J. Helfand, *The Astrophysical Journal Letters*, **464**, L161–L164 (1996).
- 31 “A Study of the Evolutionary State of the Supernova Remnant G299.2–2.9,” P. Slane, O. Vancura, and J. P. Hughes, *The Astrophysical Journal*, **465**, 840–844 (1996).
- 32 “Hubble Space Telescope Observations of Oxygen-rich Supernova Remnants in the Magellanic Clouds. I. Narrow-band Imaging of N132D in the LMC,” J. A. Morse, W. P. Blair, M. A. Dopita, J. P. Hughes, R. P. Kirshner, K. S. Long, J. C. Raymond, R. S. Sutherland, and P. F. Winkler, *The Astronomical Journal*, **112**, 509–533 (1996).
- 33 “Detection of a Temperature Structure in the Coma Cluster of Galaxies with *ASCA*,” H. Honda, M. Hirayama, M. Watanabe, H. Kunieda, Y. Tawara, K. Yamashita, T. Ohashi, J. P. Hughes, and J. P. Henry, *The Astrophysical Journal*, **473**, L71–L74 (1996).
- 34 “Supernova Remnants Associated with Molecular Clouds in the Large Magellanic Cloud,” K. R. Banas, J. P. Hughes, L. Bronfman, and L.-Å. Nyman, *The Astrophysical Journal*, **480**, 607–617 (1997).
- 35 “Interpretation of the Center-Filled X-ray Emission from the Supernova Remnant W44,” I. Harrus, J. P. Hughes, K. P. Singh, K. Koyama, and I. Asaoka, *The Astrophysical Journal*, **488**, 781–791 (1997).
- 36 “Another X-ray–Discovered Cluster of Galaxies Associated with CL 0016+16,” J. P. Hughes and M. Birkinshaw, *The Astrophysical Journal*, **497**, 645–649 (1998).
- 37 “The X-ray Iron Emission from Tycho’s Supernova Remnant,” U. Hwang, J. P. Hughes, and R. A. Petre, *The Astrophysical Journal*, **497**, 833–841 (1998).
- 38 “Study of the Composite Remnant MSH 11–62,” I. M. Harrus, J. P. Hughes, and P. O. Slane, *The Astrophysical Journal*, **499**, 273–281 (1998).
- 39 “A Measurement of the Hubble Constant from the X-Ray Properties and the Sunyaev-Zel’dovich Effect of CL0016+16,” J. P. Hughes and M. Birkinshaw, *The Astrophysical Journal*, **501**, 1–14 (1998).
- 40 “A Very Hot, High Redshift Cluster of Galaxies: More Trouble for $\Omega_0 = 1$,” M. Donahue, G. M. Voit, I. Gioia, G. Luppino, J. P. Hughes, and J. T. Stocke, *The Astrophysical Journal*, **502**, 550–557 (1998).
- 41 “*ASCA* X-ray Spectroscopy of LMC Supernova Remnants and the Metal Abundances of the LMC,” J. P. Hughes, I. Hayashi, and K. Koyama, *The Astrophysical Journal*, **505**, 732–748 (1998).
- 42 “BVRI Light Curves for 22 Type Ia Supernovae,” A. G. Riess, R. P. Kirshner, B. P. Schmidt, S. Jha, P. Challis, P. M. Garnavich, A. A. Esin, C. Carpenter, R. Grashius, R. E. Schild, P. L. Berlind, J. P. Huchra, C. F. Prosser, E. E. Falco, P. J. Benson, C. Briceño, C., W. R. Brown, N. Caldwell, I. P. Dell’Antonio, A. V. Filippenko, A. A. Goodman, N. A. Grogin, T. Groner, J. P. Hughes, P. J. Green, R. A. Jansen, J. T. Kleyna, J. X. Luu, L. M. Macri, B. A. McLeod, K. K. McLeod,

- B. R. McNamara, B. McLean, A. A. E. Milone, J. J. Mohr, D. Moraru, C. Peng, J. Peters, A. H. Prestwich, K. Z. Stanek, A. Szentgyorgyi, and P. Zhao, *The Astronomical Journal*, **117**, 707–724 (1999).
- 43 “Nonthermal X-Ray Emission from the Shell-Type SNR G347.5–0.5,” P. Slane, B. Gaensler, T. Dame, J. P. Hughes, P. P. Plucinsky, and A. Greene, *The Astrophysical Journal*, **525**, 357–367 (1999).
 - 44 “The Extraordinarily Rapid Expansion of the X-Ray Remnant of Kepler’s Supernova (SN 1604),” J. P. Hughes, *The Astrophysical Journal*, **527**, 298–309 (1999).
 - 45 “The Second Most Distant Cluster of Galaxies in the Extended Medium Sensitivity Survey,” M. Donahue, G. M. Voit, C. Scharf, I. Gioia, C. R. Mullis, J. P. Hughes, and J. T. Stocke, *The Astrophysical Journal*, **527**, 525–534 (1999).
 - 46 “Nucleosynthesis and Mixing in Cassiopeia A,” J. P. Hughes, C. E. Rakowski, D. N. Burrows, and P. O. Slane, *The Astrophysical Journal Letters*, **528**, L109–L113 (2000).
 - 47 “The X-ray Line Emission from the Supernova Remnant W49B,” U. Hwang, R. Petre, and J. P. Hughes, *The Astrophysical Journal*, **532**, 970–979 (2000).
 - 48 “Chandra Observations of the Crab-Like Supernova Remnant G21.5–0.9,” P. O. Slane, Y. Chen, N. Schultz, F. Seward, J. P. Hughes, and B. Gaensler, *The Astrophysical Journal Letters*, **533**, L29–L32 (2000).
 - 49 “Sunyaev-Zel’dovich Effect Derived Distances to the High Redshift Clusters MS 0451.6–0305 and CL 0016+16,” E. D. Reese, J. J. Mohr, J. E. Carlstrom, M. Joy, L. Grego, G. P. Holder, W. L. Holzapfel, J. P. Hughes, S. Patel, and M. Donahue, *The Astrophysical Journal*, **533**, 38–49 (2000).
 - 50 “Hubble Space Telescope Observations of Oxygen-rich Supernova Remnants in the Magellanic Clouds. II. Elemental Abundances in N132D and 1E 0102.2-7219.” W. P. Blair, J. A. Morse, J. C. Raymond, R. P. Kirshner, J. P. Hughes, M. A. Dopita, R. S. Sutherland, K. S. Long, and P. F. Winkler, *The Astrophysical Journal*, **537**, 667–689 (2000).
 - 51 “A Merger Scenario for the Dynamics of Abell 665,” P. Gómez, J. P. Hughes, and M. Birkinshaw, *The Astrophysical Journal*, **540**, 726–740 (2000).
 - 52 “Distance and Mass of the Galaxy Cluster A1995 Derived from Sunyaev-Zel’dovich Effect and X-ray Measurements,” S. K. Patel, M. Joy, J. E. Carlstrom, G. P. Holder, E. D. Reese, P. L. Gómez, J. P. Hughes, L. Grego, and W. L. Holzapfel, *The Astrophysical Journal*, **541**, 37–48 (2000).
 - 53 “Discovery of X-ray Emission from G328.4+0.2, a Crab-Like Supernova Remnant,” J. P. Hughes, P. Slane, and P. P. Plucinsky, *The Astrophysical Journal*, **542**, 386–391 (2000).
 - 54 “Electron Heating and Cosmic Rays at a Supernova Shock from Chandra X-ray Observations of 1E 0102.2–7219,” J. P. Hughes, C. E. Rakowski, and A. Decourchelle, *The Astrophysical Journal Letters*, **543**, L61–L65 (2000).
 - 55 “The Expansion of the X-Ray Remnant of Tycho’s Supernova (SN 1572),” J. P. Hughes, *The Astrophysical Journal Letters*, **545**, L53–L56 (2000).

- 56 “A Broadband X-ray Study of Supernova Remnant 3C397,” S. Safi-Harb, R. Petre, K. A. Arnaud, J. W. Keohane, K. J. Borkowski, K. K. Dyer, S. P. Reynolds, and J. P. Hughes, *The Astrophysical Journal*, **545**, 922–938 (2000).
- 57 “Measuring Cluster Temperature Profiles with it XMM/EPIC,” M. Arnaud, D. M. Neumann, N. Aghanim, R. Gastaud, S. Majerowicz, and J. P. Hughes, *Astronomy & Astrophysics*, **365**, L80–L86 (2001).
- 58 “Two New Ejecta-Dominated Galactic Supernova Remnants: G337.2–0.7 and G309.2 –0.6,” C. Rakowski, J. P. Hughes, and P. Slane, *The Astrophysical Journal*, **548**, 258–268 (2001).
- 59 “RXJ 0852.0–0462: Another Nonthermal Shell-Type SNR (G266.2–1.2),” P. Slane, J. P. Hughes, R. Edgar, P. P. Plucinsky, H. Tsunemi, E. Miyata, and B. Aschenbach, *The Astrophysical Journal*, **548**, 814–819 (2001).
- 60 “ASCA Observation of the Twin Supernova Remnants in the Large Magellanic Cloud, DEM L316,” M. Nishiuchi, J. Yokogawa, K. Koyama, and J. P. Hughes, *Publ. Astron. Soc. Japan*, **53**, 99–104 (2001).
- 61 “A New ASCA and ROSAT Study of the Supernova Remnant G272.2–3.2,” I. M. Harrus, P. O. Slane, Randall Smith, and J. P. Hughes, *The Astrophysical Journal*, **552**, 614–623 (2001).
- 62 “A Pulsar Wind Nebula in the Oxygen-Rich Supernova Remnant G292.0+1.8,” J. P. Hughes, P. O. Slane, D. N. Burrows, G. Garmire, J. A. Nousek, C. M. Olbert, and J. W. Keohane, *The Astrophysical Journal Letters*, **559**, L153–L156 (2001).
- 63 “An X-Ray Study of the Supernova Remnant G290.1–0.8,” P. Slane, R. Smith, J. P. Hughes, and R. Petre, *The Astrophysical Journal*, **564**, 284–290 (2002).
- 64 “The Structure of the Oxygen-rich Supernova Remnant G292.0+1.8 from Chandra X-ray Images: Shocked Ejecta and Circumstellar Medium,” S. Park, P. W. A. Roming, J. P. Hughes, P. O. Slane, D. N. Burrows, G. Garmire, and J. A. Nousek, *The Astrophysical Journal Letters*, **564**, L39–L43 (2002).
- 65 “Chandra Observations of Unresolved X-Ray Sources Around Two Clusters of Galaxies,” S. M. Molnar, J. P. Hughes, M. Donahue, and M. Joy, *The Astrophysical Journal*, **573**, L91–L94 (2002).
- 66 “ASCA Study of the High-Luminosity SNR G349.7+0.2,” P. O. Slane, Y. Chen, J. S. Lazendic, and J. P. Hughes, *The Astrophysical Journal*, **580**, 904–908 (2002).
- 67 “Iron Rich Ejecta in the Supernova Remnant DEM L71,” J. P. Hughes, P. Ghavamian, C. E. Rakowski, and P. O. Slane, *The Astrophysical Journal Letters*, **582**, L95–L99 (2003).
- 68 “The Radial Structure of Supernova Remnant N103B,” K. T. Lewis, D. N. Burrows, J. P. Hughes, P. O. Slane, G. P. Garmire, and J. A. Nousek, *The Astrophysical Journal*, **582**, 770–782 (2003).
- 69 “Revealing New Physical Structures in the Supernova Remnant N63A through Chandra Imaging Spectroscopy,” J. S. Warren, J. P. Hughes, and P. O. Slane, *The Astrophysical Journal*, **583**, 260–266 (2003).

- 70 “X-ray Emission from Multi-phase Shock of Supernova Remnant N49 in the Large Magellanic Cloud,” S. Park, D. N. Burrows, G. Garmire, J. A. Nousek, J. P. Hughes, and R. M. Williams, *The Astrophysical Journal*, **586**, 210–223 (2003).
- 71 “The Physics of Supernova Remnant Blast Waves. I. Kinematics of DEM L71 in the LMC,” P. Ghavamian, C. E. Rakowski, J. P. Hughes, and T. B. Williams, *The Astrophysical Journal*, **590**, 833–845 (2003).
- 72 “The Physics of Supernova Remnant Blast Waves. II. Electron-Ion Equilibration in DEM L71 in the LMC,” C. E. Rakowski, P. Ghavamian, and J. P. Hughes, *The Astrophysical Journal*, **590**, 846–857 (2003).
- 73 “An X-Ray Pulsar in the Oxygen-Rich Supernova Remnant G292.0+1.8,” J. P. Hughes, P. O. Slane, S. Park, P. W. A. Roming, and D. N. Burrows, *The Astrophysical Journal Letters*, **591**, L139–L142 (2003).
- 74 “Detection of Magnesium-Rich Ejecta in the Middle-Aged Supernova Remnant N49B,” S. Park, J. P. Hughes, P. O. Slane, D. N. Burrows, J. S. Warren, G. Garmire, and J. A. Nousek, *The Astrophysical Journal Letters*, **592**, L41–L44 (2003).
- 75 “X-Ray Observations of the Compact Central Object in Supernova Remnant G347.3 –0.5,” J. S. Lazendic, P. O. Slane, B. M. Gaensler, P. P. Plucinsky, J. P. Hughes, D. K. Galloway, and F. Crawford, *The Astrophysical Journal Letters*, **593**, L27–L30 (2003).
- 76 “The Mass, Baryonic Fraction, and X-ray Temperature of the Luminous, High Redshift Cluster of Galaxies, MS0451.6–0305,” M. Donahue, J. A. Gaskin, S. K. Patel, M. Joy, D. Clowe, and J. P. Hughes, *The Astrophysical Journal*, **598**, 190–209 (2003).
- 77 “0103–72.6: A New Oxygen-Rich Supernova Remnant in the Small Magellanic Cloud,” S. Park, J. P. Hughes, D. N. Burrows, P. O. Slane, J. A. Nousek, and G. P. Garmire, *The Astrophysical Journal Letters*, **598**, L95–L98 (2003).
- 78 “X-ray Observations of the Compact Source in CTA 1,” P. Slane, E. R. Zimmerman, J. P. Hughes, F. D. Seward, B. M. Gaensler, and M. E. Clarke, *The Astrophysical Journal*, **601**, 1045–1049 (2004).
- 79 “Nucleosynthesis in the Oxygen-Rich Supernova Remnant G292.0+1.8 from *Chandra* X-Ray Spectroscopy,” S. Park, J. P. Hughes, P. O. Slane, D. N. Burrows, P. W. A. Roming, J. A. Nousek, and G. P. Garmire, *The Astrophysical Journal Letters*, **602**, L33–L36 (2004).
- 80 “*XMM-Newton* Observation of Kepler’s Supernova Remnant,” G. Cassam-Chenaï, A. Decourchelle, J. Ballet, U. Hwang, J. P. Hughes, and R. Petre, *Astronomy & Astrophysics*, **414**, 545–558 (2004).
- 81 “A High-Resolution Study of Nonthermal Radio and X-ray Emission from SNR G347.3–0.5,” J. S. Lazendic, P. O. Slane, B. M. Gaensler, P. P. Plucinsky, J. P. Hughes, and S. P. Reynolds, *The Astrophysical Journal*, **602**, 271–285 (2004).
- 82 “An X-ray Study of the Supernova Remnant G18.95–1.1,” I. M. Harrus, P. O. Slane, J. P. Hughes, and P. Plucinsky, *The Astrophysical Journal*, **603**, 152–158 (2004).

- 83 “Raising the Dead: Clues to Type Ia Supernova Physics from the Remnant 0509–67.5,” J. S. Warren and J. P. Hughes, *The Astrophysical Journal*, **608**, 261–273 (2004).
- 84 “A Million-Second *Chandra* View of Cassiopeia A,” U. Hwang, J. M. Laming, C. Badenes, F. Berendse, J. Blondin, D. Cioffi, T. DeLaney, D. Dewey, R. Fesen, K. A. Flanagan, C. L. Fryer, P. Ghavamian, J. P. Hughes, J. A. Morse, P. P. Plucinsky, R. Petre, M. Pohl, L. Rudnick, R. Sankrit, P. O. Slane, R. K. Smith, J. Vink, and J. S. Warren, *The Astrophysical Journal Letters*, **615**, L117–L120 (2004).
- 85 “SNR N49 in the LMC: X-ray Emission from Multi-phase Shock and Neutron Star,” S. Park, D. N. Burrows, G. Garmire, J. A. Nousek, J. P. Hughes, and R. M. Williams, *Advances in Space Research*, **33**, 409–415 (2004).
- 86 “*Chandra* Detection of Ejecta in the Small-Diameter Supernova Remnant G349.7+0.2,” J. S. Lazendic, P. O. Slane, J. P. Hughes, Y. Chen, and T. M. Dame, *The Astrophysical Journal*, **618**, 733–743 (2005).
- 87 “Infrared Echoes near the Supernova Remnant Cassiopeia A,” O. Krause, G. H. Rieke, S. M. Birkmann, E. Le Floc’h, K. D. Gordon, E. Egami, J. Bieging, J. P. Hughes, E. T. Young, J. L. Hinz, S. P. Quanz, and D. C. Hines, *Science*, **308**, 1604–1606 (2005).
- 88 “Cosmic Ray Acceleration at the Forward Shock in Tycho’s Supernova Remnant: Evidence from *Chandra* X-ray Observations,” J. S. Warren, J. P. Hughes, C. Badenes, P. Ghavamian, C. F. McKee, D. Moffett, P. P. Plucinsky, C. Rakowski, E. Reynoso, and P. Slane, *The Astrophysical Journal*, **634**, 376–389 (2005).
- 89 “Exploring the Kinematics of the Oxygen-Rich Supernova Remnant G292.0+1.8: Ejecta Shells, Fast-Moving Knots, and Shocked Circumstellar Material,” P. Ghavamian, J. P. Hughes, and T. B. Williams, *The Astrophysical Journal*, **635**, 365–380 (2005).
- 90 “First Results on Shear-Selected Clusters from the Deep Lens Survey: Optical Imaging, Redshifts, and X-Ray Followup of the First 8.6 Deg²,” D. Wittman, I. Dell’Antonio, J. P. Hughes, V. E. Margoniner, J. A. Tyson, J. G. Cohen, and D. Norman, *The Astrophysical Journal*, **643**, 128–143 (2006).
- 91 “*Hubble Space Telescope* Observations of Oxygen-rich Supernova Remnants in the Magellanic Clouds. III. WFPC2 Imaging of the Young, Crab-like Supernova Remnant SNR0540–69.3,” J. A. Morse, N. Smith, W. P. Blair, R. P. Kirshner, P. F. Winkler, and J. P. Hughes, *The Astrophysical Journal*, **644**, 188–197 (2006).
- 92 “Constraints on the Physics of Type Ia Supernovae from the X-ray Spectrum of the Tycho Supernova Remnant,” C. Badenes, K. J. Borkowski, J. P. Hughes, U. Hwang, and E. Bravo, *The Astrophysical Journal*, **645**, 1373–1391 (2006).
- 93 “The X-ray Emission of the Supernova Remnant W49B Observed with *XMM-Newton*,” M. Miceli, A. Decourchelle, J. Ballet, U. Hwang, J. P. Hughes, and R. Petre, *Astronomy & Astrophysics*, **453**, 567–578 (2006).

- 94 “The *Chandra* View of the Supernova Remnant 0506–68.0 in the Large Magellanic Cloud,” J. P. Hughes, M. Rafelski, J. S. Warren, C. Rakowski, P. Slane, D. Burrows, and J. Nousek, *The Astrophysical Journal Letters*, **645**, L117–L120 (2006).
- 95 “Can Ejecta-Dominated Supernova Remnants be Typed from their X-ray Spectra? The Case of G337.2-0.7,” C. E. Rakowski, C. Badenes, B. M. Gaensler, J. D. Gelfand, J. P. Hughes, and P. O. Slane, *The Astrophysical Journal*, **646**, 982–1000 (2006).
- 96 “The X-ray Structure of the Pulsar Bow Shock G189.22+2.90 in the Supernova Remnant IC 443,” B. M. Gaensler, S. Chatterjee, P. O. Slane, E. van der Swaluw, F. Camilo, and J. P. Hughes, *The Astrophysical Journal*, **648**, 1037–1042 (2006).
- 97 “Discovery of a Candidate Central Compact Object in the Galactic Nonthermal SNR G330.2+1.0,” S. Park, K. Mori, O. Kargaltsev, P. O. Slane, J. P. Hughes, D. N. Burrows, G. P. Garmire, and G. G. Pavlov, *The Astrophysical Journal Letters*, **653**, L37–L40 (2006).
- 98 “The X-ray Observatory *Suzaku*,” K. Mitsuda et al., *Publ. Astron. Soc. Japan*, **59**, 1–7 (2007).
- 99 “*Suzaku* Observations of the Local and Distant Hot ISM,” R. K. Smith, M. W. Bautz, R. J. Edgar, R. Fujimoto, K. Hamaguchi, J. P. Hughes, M. Ishida, R. Kelley, C. A. Kilbourne, K. D. Kuntz, D. McCammon, E. Miller, K. Mitsuda, K. Mukai, P. P. Plucinsky, F. S. Porter, S. L. Snowden, Y. Takei, Y. Terada, Y. Tsuboi, and N. Yamasaki, *Publ. Astron. Soc. Japan*, **59**, 141–150 (2007).
- 100 “Detection of Highly-ionized Carbon and Nitrogen Emission Lines from the Cygnus Loop Supernova Remnant with the *Suzaku* Observatory,” E. Miyata, S. Katsuda, H. Tsunemi, J. P. Hughes, M. Kokubun, and F. S. Porter, *Publ. Astron. Soc. Japan*, **59**, 163–170 (2007).
- 101 “A *Suzaku* Observation of the Low-Ionization Fe-line Emission from RCW 86,” M. Ueno, R. Sato, J. Kataoka, A. Bamba, I. Harrus, J. Hiraga, J. P. Hughes, C. A. Kilbourne, K. Koyama, M. Kokubun, H. Nakajima, M. Ozaki, R. Petre, T. Takahashi, T. Tanaka, H. Tomida, and H. Yamaguchi, *Publ. Astron. Soc. Japan*, **59**, 171–176 (2007).
- 102 “*Suzaku* Observations of HESS J1616–508: Evidence for a Dark Particle Accelerator,” H. Matsumoto, M. Ueno, A. Bamba, Y. Hyodo, H. Mori, H. Uchiyama, T. Tsuru, K. Koyama, J. Kataoka, H. Katagiri, T. Takahashi, J. Hiraga, S. Yamauchi, J. P. Hughes, A. Senda, M. Kokubun, T. Kohmura, and F. S. Porter, *Publ. Astron. Soc. Japan*, **59**, 199–208 (2007).
- 103 “Discovery of a Possible X-Ray Counterpart to HESS J1804–216,” A. Bamba, K. Koyama, J. S. Hiraga, J. P. Hughes, T. Kohmura, M. Kokubun, Y. Maeda, H. Matsumoto, A. Senda, T. Takahashi, Y. Tsuboi, S. Yamauchi, and T. Yuasa, *Publ. Astron. Soc. Japan*, **59**, 209–214 (2007).
- 104 “*Suzaku* Observation of the Metallicity Distribution in the Intracluster Medium of the Fornax Cluster,” K. Matsushita, Y. Fukazawa, J. P. Hughes, T. Kitaguchi, K. Makishima, K. Nakazawa, T. Ohashi, N. Ota, T. Tamura, M. Tozuka, T. G. Tsuru, Y. Urata, and N. Y. Yamasaki, *Publ. Astron. Soc. Japan*, **59**, 327–338 (2007).

- 105 “Search for Oxygen Emission from Warm-Hot Intergalactic Medium around A2218 with *Suzaku*,” Y. Takei, T. Ohashi, J. P. Henry, K. Mitsuda, R. Fujimoto, T. Tamura, N. Y. Yamasaki, K. Hayashida, N. Tawa, K. Matsushita, M. W. Bautz, J. P. Hughes, G. M. Madejski, R. L. Kelley, and K. A. Arnaud, *Publ. Astron. Soc. Japan*, **59**, 339–349 (2007).
- 106 “Are the Models for Type Ia Supernova Progenitors Consistent with the Properties of Supernova Remnants?” C. Badenes, J. P. Hughes, E. Bravo, and N. Langer, *The Astrophysical Journal*, **662**, 472–486 (2007).
- 107 “*Chandra* ACIS Survey of M33 (ChASeM33): X-ray Imaging Spectroscopy of M33SNR21, the brightest X-ray Supernova Remnant in M33,” T. J. Gaetz, W. P. Blair, J. P. Hughes, P. F. Winkler, K. S. Long, T. G. Pannuti, B. Williams, R. J. Edgar, P. Ghavamian, P. P. Plucinsky, M. Sasaki, R. P. Kirshner, M. Avillez, and D. Breitschwerdt, *The Astrophysical Journal*, **663**, 234–243 (2007).
- 108 “The Radio Emission, X-ray Emission, and Hydrodynamics of G328.4+0.2: A Comprehensive Analysis of a Luminous Pulsar Wind Nebula, its Neutron Star, and the Progenitor Supernova Explosion,” J. D. Gelfand, B. M. Gaensler, P. O. Slane, D. J. Patnaude, J. P. Hughes, and F. Camilo, *The Astrophysical Journal*, **663**, 468–486 (2007).
- 109 “The Detection of Far Ultraviolet Line Emission from Balmer-Dominated Supernova Remnants in the Large Magellanic Cloud,” P. Ghavamian, W. P. Blair, R. Sankrit, J. C. Raymond, and J. P. Hughes, *The Astrophysical Journal*, **664**, 304–321 (2007).
- 110 “The Blast Wave of Tycho’s Supernova Remnant,” G. Cassam-Chenaï, J. P. Hughes, J. Ballet, and A. Decourchelle, *The Astrophysical Journal*, **664**, 304–321 (2007).
- 111 “*Chandra* X-ray Study of the Galactic Supernova Remnant G299.2–2.9,” S. Park, P. O. Slane, J. P. Hughes, K. Mori, D. N. Burrows, and G. P. Garmire, *The Astrophysical Journal*, **665**, 1173–1181 (2007).
- 112 “Observations of X-rays and Thermal Dust Emission from the Supernova Remnant Kes 75,” T. D. Morton, P. Slane, K. J. Borkowski, S. P. Reynolds, D. J. Helfand, B. M. Gaensler, and J. P. Hughes, *The Astrophysical Journal*, **667**, 219–225 (2007).
- 113 “A Deep *Chandra* Observation of Kepler’s Supernova Remnant: A Type Ia Event with Circumstellar Interaction,” S. P. Reynolds, K. J. Borkowski, U. Hwang, J. P. Hughes, C. Badenes, J. M. Laming, and J. M. Blondin, *The Astrophysical Journal Letters*, **668**, L135–L138 (2007).
- 114 “X-Ray Study of Temperature and Abundance Profiles of the Cluster of Galaxies Abell 1060 with *Suzaku*,” K. Sato, N. Y. Yamasaki, M. Ishida, Y. Ishisaki, T. Ohashi, H. Kawahara, T. Kitaguchi, M. Kawaharada, M. Kokubun, K. Makishima, N. Ota, K. Nakazawa, T. Tamura, K. Matsushita, N. Kawano, Y. Fukazawa, and J. P. Hughes, *Publ. Astron. Soc. Japan*, **59**, 299–317 (2007).
- 115 “*Chandra* X-ray Observations of Four Type Ia Supernovae: SN2002bo, SN2002ic, SN2005gj, and SN2005ke,” J. P. Hughes, N. Chugai, R. Chevalier, P. Lundqvist, and E. Schlegel, *The Astrophysical Journal*, **670**, 1260–1274 (2007).

- 116 “A Half-Megasecond *Chandra* Observation of the Galactic Oxygen-Rich Supernova Remnant G292.0+1.8,” S. Park, J. P. Hughes, P. O. Slane, D. N. Burrows, B. M. Gaensler, and P. Ghavamian, *The Astrophysical Journal Letters*, **670**, L121–L124 (2007).
- 117 “Probing the Relationship Between X-Ray–Derived and Weak-Lensing–Derived Masses for Shear-Selected Galaxy Clusters: A781,” N. Sehgal, J. P. Hughes, D. Wittman, V. E. Margoniner, J. A. Tyson, P. Gee, and I. Dell’Antonio, *The Astrophysical Journal*, **670**, 163–175 (2008).
- 118 “*Chandra* ACIS Survey of M33 (ChASEM33): A First Look,” P. P. Plucinsky, B. Williams, K. S. Long, T. J. Gaetz, M. Sasaki, W. Pietsch, R. Tüllmann, R. K. Smith, W. P. Blair, D. Helfand, J. P. Hughes, P. F. Winkler, M. Avillez, L. Bianchi, D. Breitschwerdt, R. J. Edgar, P. Ghavamian, J. Grindlay, F. Haberl, R. Kirshner, K. Kuntz, T. Mazeh, T. G. Pannuti, A. Shporer, and D. A. Thilker, *The Astrophysical Journal Supplement*, **174**, 366–378 (2008).
- 119 “*Suzaku* Observations of the North Polar Spur: Evidence for Nitrogen Enhancement,” E. D. Miller, H. Tsunemi, M. W. Bautz, D. McCammon, R. Fujimoto, J. P. Hughes, S. Katsuda, M. Kokubun, K. Mitsuda, F. S. Porter, Y. Takei, Y. Tsuboi, and N. K. Yamasaki, *Publ. Astron. Soc. Japan*, **60**, S95–S106 (2008).
- 120 “Abundance Inhomogeneity in the Northeastern Rim of the Cygnus Loop Revealed by *Suzaku* Observatory,” S. Katsuda, H. Tsunemi, H. Uchida, E. Miyata, N. Nemes, E. D. Miller, K. Mori, and J. P. Hughes, *Publ. Astron. Soc. Japan*, **60**, S115–S122 (2008).
- 121 “Measuring the Broad-Band X-Ray Spectrum from 400 eV to 40 keV in the Southwest Part of the Supernova Remnant RX J1713.7–3946,” T. Takahashi, T. Tanaka, Y. Uchiyama, J. S. Hiraga, K. Nakazawa, S. Watanabe A. Bamba, J. P. Hughes, H. Katagiri, J. Kataoka, M. Kokubun, K. Koyama K. Mori, R. Petre, H. Takahashi, and Y. Tsuboi, *Publ. Astron. Soc. Japan*, **60**, S131–S140 (2008).
- 122 “X-Ray Spectroscopy of SN1006 with *Suzaku*,” H. Yamaguchi, K. Koyama, S. Katsuda, H. Nakajima, J. P. Hughes, A. Bamba, J. S. Hiraga, K. Mori, M. Ozaki, and T. G. Tsuru, *Publ. Astron. Soc. Japan*, **60**, S141–S152 (2008).
- 123 “*Suzaku* Wide-Band Observations of SN1006,” A. Bamba, Y. Fukazawa, J. S. Hiraga, J. P. Hughes, H. Katagiri, M. Kokubun, K. Koyama, E. Miyata, T. Mizuno, K. Mori, H. Nakajima, M. Ozaki, R. Petre, H. Takahashi, T. Takahashi, T. Tanaka, Y. Terada, Y. Uchiyama, S. Watanabe, and H. Yamaguchi, *Publ. Astron. Soc. Japan*, **60**, S153–S162 (2008).
- 124 “*Suzaku* Observation of HCG 62: Temperature, Abundance, and Extended Hard X-Ray Emission Profiles,” K. Tokoi, K. Sato, Y. Ishisaki, T. Ohashi, N. Y. Yamasaki, K. Nakazawa, K. Matsushita, Y. Fukazawa, A. Hoshino, T. Tamura, C. Egawa, N. Kawano, N. Ota, N. Isobe, M. Kawaharada, H. Awaki, and J. P. Hughes, *Publ. Astron. Soc. Japan*, **60**, S317–S332 (2008).
- 125 “Discovery of Fast-Moving X-ray-Emitting Ejecta Knots in the Oxygen-Rich Supernova Remnant Puppis A,” S. Katsuda, K. Mori, H. Tsunemi, S. Park, U. Hwang,

- D. N. Burrows, J. P. Hughes, and P. O. Slane, *The Astrophysical Journal*, **678**, 297–302 (2008).
- 126 “The End of Amnesia: A New Method for Measuring the Metallicity of Type Ia Supernova Progenitors Using Manganese Lines in Supernova Remnants,” C. Badenes, E. Bravo, and J. P. Hughes, *The Astrophysical Journal Letters*, **680**, L33–L37 (2008).
- 127 “The Persistence of Memory, or How the X-ray Spectrum of SNR 0509–67.5 Reveals the Brightness of Its Parent Type Ia Supernova,” C. Badenes, J. P. Hughes, G. Cassam-Chenaï, and E. Bravo, *The Astrophysical Journal*, **680**, 1149–1157 (2008).
- 128 “Morphological Evidence for Azimuthal Variations of the Cosmic-Ray Ion Acceleration at the Blast Wave of SN 1006,” G. Cassam-Chenaï, J. P. Hughes, E. M. Reynoso, C. Badenes, and D. Moffett, *The Astrophysical Journal*, **680**, 1180–1197 (2008).
- 129 “Evidence for Resonance Line Scattering in the *Suzaku* X-ray Spectrum of the Cygnus Loop,” E. Miyata, K. Masai, and J. P. Hughes, *Publ. Astron. Soc. Japan*, **60**, 512–526 (2008).
- 130 “The *Chandra* ACIS Survey of M33 (ChASeM33): Investigating the Hot Ionized Medium in NGC604,” R. Tuellmann, T. J. Gaetz, P. P. Plucinsky, K. S. Long, J. P. Hughes, W. P. Blair, P. F. Winkler, T. G. Pannuti, D. Breitschwerdt, and P. Ghavamian, *The Astrophysical Journal*, **685**, 919–932 (2008).
- 131 “Deep *Chandra* Observation of the Pulsar Wind Nebula Powered by Pulsar J1846 –0258 in the Supernova Remnant Kes 75,” C.-Y. Ng, P. O. Slane, B. M. Gaensler, and J. P. Hughes, *The Astrophysical Journal*, **686**, 508–519 (2008).
- 132 “A Physical Interpretation of the Jet-like X-ray Emission from Supernova Remnant W49B,” M. Miceli, A. Decourchelle, J. Ballet, F. Bocchino, J. P. Hughes, U. Hwang, and R. Petre, *Advances in Space Research*, **41**, 390–395 (2008).
- 133 “Oxygen line mapping of SN 1006 with *Suzaku*,” A. Bamba, H. Yamaguchi, K. Koyama, J. S. Hiraga, S. Holt, J. P. Hughes, H. Katagiri, J. Kataoka, S. Katsuda, S. Kitamoto, M. Kokubun, H. Matsumoto, E. Miyata, K. Mori, H. Nakajima, M. Ozaki, R. Petre, A. Sekiguchi, T. Takahashi, T. Tanaka, Y. Terada, H. Tomida, Y. Tsuboi, M. Tsujimoto, H. Tsunemi, Y. Uchiyama, M. Ueno, and S. Watanabe, *Advances in Space Research*, **41**, 411–415 (2008).
- 134 “*Suzaku* Observations of Tycho’s Supernova Remnant,” T. Tamagawa, A. Hayato, S. Nakamura, Y. Terada, A. Bamba, J. S. Hiraga, J. P. Hughes, U. Hwang, J. Kataoka, K. Kinugasa, H. Kunieda, T. Tanaka, H. Tsunemi, M. Ueno, S. S. Holt, M. Kokubun, E. Miyata, A. Szymkowiak, T. Takahashi, K. Tamura, D. Ueno, and K. Makishima, *Publ. Astron. Soc. Japan*, **61**, S167–S174 (2009).
- 135 “*Chandra* and *XMM* Observations of the Composite Supernova Remnant G327.1 –1.1,” T. Temim, P. Slane, B. M. Gaensler, J. P. Hughes, and E. van der Swaluw, *The Astrophysical Journal*, **691**, 895–906 (2009).
- 136 “Doppler-Broadened Iron X-Ray Lines From Tycho’s Supernova Remnant,” A. Furuzawa, D. Ueno, A. Hayato, M. Ozawa, T. Tamagawa, A. Bamba, J. P. Hughes, H. Kunieda, K. Makishima, S. S. Holt, U. Hwang, K. Kinugasa, R. Petre, K. Tamura,

- H. Tsunemi, and S. Yamauchi, *The Astrophysical Journal Letters*, **693**, L61–L65 (2009),
- 137 “Physical Properties of Four SZE-Selected Galaxy Clusters in the Southern Cosmology Survey,” F. Menanteau, and J. P. Hughes, *The Astrophysical Journal Letters*, **694**, L136–L139 (2009).
- 138 “Southern Cosmology Survey. III. QSOs from Combined GALEX and Optical Photometry,” R. Jimenez, D. N. Spergel, M. D. Niemack, F. Menanteau, J. P. Hughes, L. Verde, and A. Kosowsky, *The Astrophysical Journal Supplement*, **181**, 439–443 (2009).
- 139 “Nonthermal X-Rays from Supernova Remnant G330.2+1.0 and the Characteristics of its Central Compact Object,” S. Park, O. Kargaltsev, G. G. Pavlov, K. Mori, P. O. Slane, J. P. Hughes, D. N. Burrows, and G. P. Garmire, *The Astrophysical Journal*, **695**, 431–441 (2009).
- 140 “Southern Cosmology Survey I: Optical Cluster Detections and Predictions for the Southern Common-Area Millimeter-Wave Experiments,” F. Menanteau, J. P. Hughes, R. Jimenez, C. Hernández-Monteagudo, L. Verde, A. Kosowsky, K. Moodley, and N. Roche, *The Astrophysical Journal*, **698**, 1221–1231 (2009).
- 141 “First Lensing Measurements of SZ-detected Clusters,” R. N. McInnes, F. Menanteau, A. F. Heavens, J. P. Hughes, R. Jimenez, R. Massey, P. Simon, and A. N. Taylor, *Monthly Notices of the Royal Astronomical Society*, **399**, L84–L88 (2009).
- 142 “*Suzaku* Observations of Abell 1795: Cluster Emission to R_{200} ,” M. W. Bautz, E. D. Miller, J. S. Sanders, K. A. Arnaud, R. F. Mushotzky, F. S. Porter, K. Hayashida, J. P. Henry, J. P. Hughes, M. Kawaharada, K. Makashima, M. Sato, and T. Tamura, *Publ. Astron. Soc. Japan*, **61**, 1117–1133 (2009).
- 143 “X-ray Spectroscopy of the Core of the Perseus Cluster with *Suzaku*: Elemental Abundances in the Intracluster Medium,” T. Tamura, Y. Maeda, K. Mitsuda, A. C. Fabian, J. S. Sanders, A. Furuzawa, J. P. Hughes, R. Iizuka, K. Matsushita, and T. Tamagawa, *The Astrophysical Journal Letters*, **705**, L62–L66 (2009).
- 144 “*Suzaku* X-Ray Imaging and Spectroscopy of Cassiopeia A,” Y. Maeda, Y. Uchiyama, A. Bamba, H. Kosugi, H. Tsunemi, E. Helder, J. Vink, N. Kodaka, Y. Terada, Y. Fukazawa, J. Hiraga, J. P. Hughes, M. Kokubun, T. Kouzu, H. Matsumoto, E. Miyata, R. Nakamura, S. Okada, K. Someya, T. Tamagawa, K. Tamura, K. Totsuka, Y. Tsuboi, Y. Ezoe, S. S. Holt, M. Ishida, T. Kamae, R. Petre, and T. Takahashi *Publ. Astron. Soc. Japan*, **61**, 1217–1228 (2009).
- 145 “X-Ray Measured Dynamics of Tycho’s Supernova Remnant,” S. Katsuda, R. Petre, J. P. Hughes, U. Hwang, H. Yamaguchi, A. Hayato, K. Mori, and H. Tsunemi, *The Astrophysical Journal*, **709**, 1387–1395 (2010).
- 146 “A Deep *Chandra* Observation of the Oxygen-Rich Supernova Remnant 0540–69.3 in the Large Magellanic Cloud,” S. Park, J. P. Hughes, P. O. Slane, K. Mori, and D. N. Burrows, *The Astrophysical Journal*, **710**, 948–957 (2010).
- 147 “The Outer Shock of the Oxygen-Rich Supernova Remnant G292.0+1.8: Evidence for the Interaction with the Stellar Winds from its Massive Progenitor,” J.-J. Lee, S. Park,

- J. P. Hughes, P. O. Slane, B. M. Gaensler, P. Ghavamian, and D. N. Burrows, *The Astrophysical Journal*, **711**, 861–869 (2010).
- 148 “The *Chandra* ACIS Survey of M33: X-ray, Optical, and Radio Properties of the Supernova Remnants,” K. S. Long, W. P. Blair, P. F. Winkler, R. H. Becker, T. J. Gaetz, P. Ghavamian, D. J. Helfand, J. P. Hughes, R. P. Kirshner, K. D. Kuntz, E. K. McNeil, T. G. Pannuti, P. P. Plucinsky, D. Saul, R. Tüllmann, and B. Williams, *The Astrophysical Journal Supplement*, **187**, 495–559 (2010).
- 149 “X-ray Temperature and Mass Measurements to the Virial Radius of Abell 1413 with *Suzaku*,” A. Hoshino, J. P. Henry, K. Sato, H. Akamatsu, W. Yokota, S. Sasaki, Y. Ishisaki, T. Ohashi, M. Bautz, Y. Fukazawa, N. Kawano, A. Furuzawa, K. Hayashida, T. Tawa, J. P. Hughes, M. Kokubun, and T. Tamura, *Publ. Astron. Soc. Japan*, **62**, 371–389 (2010).
- 150 “Ionization Equilibrium Timescales in Collisional Plasmas,” R. K. Smith, and J. P. Hughes, *The Astrophysical Journal*, **718**, 583–585 (2010).
- 151 “Searching for the Pulsar in G18.95–1.1: Discovery of an X-ray Point Source and Associated Synchrotron Nebula with *Chandra*,” R. Tuellmann, P. P. Plucinsky, T. J. Gaetz, P. Slane, J. P. Hughes, I. Harrus, and T. G. Pannuti, *The Astrophysical Journal*, **720**, 848–852 (2010).
- 152 “The Atacama Cosmology Telescope: A Measurement of the $600 < l < 8000$ Cosmic Microwave Background Power Spectrum at 148 GHz,” J. W. Fowler, V. Acquaviva, P. A. R. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, B. Burger, J. Chervenak, S. Das, M. J. Devlin, S. R. Dicker, W. B. Doriese, J. Dunkley, R. Dünner, T. Essinger-Hileman, R. P. Fisher, A. Hajian, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, G. C. Hilton, M. Hilton, A. D. Hincks, R. Hlozek, K. M. Huffenberger, D. H. Hughes, J. P. Hughes, L. Infante, K. D. Irwin, R. Jimenez, J. B. Juin, M. Kaul, J. Klein, A. Kosowsky, J. M. Lau, M. Limon, Y.-T. Lin, R. H. Lupton, T. A. Marriage, D. Marsden, K. Martocci, P. Mauskopf, F. Menanteau, K. Moodley, H. Moseley, C. B. Netterfield, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, H. Quintana, B. Reid, N. Sehgal, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, H. Trac, C. Tucker, L. Verde, R. Warne, G. Wilson, E. Wollack, and Y. Zhao, *The Astrophysical Journal*, **722**, 1148–1161 (2010).
- 153 “The Atacama Cosmology Telescope: Physical Properties and Purity of Sunyaev-Zel'dovich Effect Selected Clusters,” F. Menanteau, J. González, J.-B. Juin, T. A. Marriage, E. Reese, V. Acquaviva, P. Aguirre, J. W. Appel, A. J. Baker, L. F. Barrientos, E. S. Battistelli, J. R. Bond, S. Das, A. J. Deshpande, M. J. Devlin, S. Dicker, J. Dunkley, R. Dünner, T. Essinger-Hileman, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, M. Hilton, A. D. Hincks, R. Hlozek, K. M. Huffenberger, J. P. Hughes, L. Infante, K. D. Irwin, J. Klein, A. Kosowsky, Y.-T. Lin, D. Marsden, K. Moodley, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, N. Sehgal, J. Sievers, D. N. Spergel, S. T. Staggs, D. Swetz, E. Switzer, R. Thornton, H. Trac, R. Warne, and E. Wollack, *The Astrophysical Journal*, **723**, 1523–1541 (2010).

- 154 “Expansion Velocity of Ejecta in Tycho’s Supernova Remnant Measured by Doppler Broadened X-ray Line Emission,” A. Hayato, H. Yamaguchi, T. Tamagawa, S. Katsuda, U. Hwang, J. P. Hughes, M. Ozawa, A. Bamba, K. Kinugasa, Y. Terada, A. Furuzawa, H. Kunieda, and K. Makishima, *The Astrophysical Journal*, **725**, 894–903 (2010).
- 155 “Southern Cosmology Survey II: Massive Optically-Selected Clusters from 70 square-degrees of the SZE Common Survey Area,” F. Menanteau, J. P. Hughes, L. F. Barrientos, A. J. Deshpande, M. Hilton, L. Infante, R. Jimenez, A. Kosowsky, K. Moodley, D. N. Spergel, and L. Verde, *The Astrophysical Journal Supplement*, **191**, 340–351 (2010).
- 156 “The Atacama Cosmology Telescope (ACT): Beam Profiles and First SZ Cluster Maps,” A. D. Hincks, V. Acquaviva, P. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, B. Burger, J. Chervenak, S. Das, M. J. Devlin, S. Dicker, W. B. Doriese, J. Dunkley, R. Dünner, T. Essinger-Hileman, R. P. Fisher, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, G. C. Hilton, M. Hilton, R. Hlozek, K. Huffenberger, D. Hughes, J. P. Hughes, L. Infante, K. D. Irwin, R. Jimenez, J. B. Juin, M. Kaul, J. Klein, A. Kosowsky, J. M. Lau, M. Limon, Y.-T. Lin, R. H. Lupton, T. Marriage, D. Marsden, K. Martocci, P. Mauskopf, F. Menanteau, K. Moodley, H. Moseley, B. Netterfield, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, H. Quintana, B. Reid, N. Sehgal, J. Sievers, D. N. Spergel, S. T. Staggs, O. Stryzak, D. Swetz, E. Switzer, R. Thornton, H. Trac, C. Tucker, L. Verde, R. Warne, G. Wilson, E. Wollack, and Y. Zhao, *The Astrophysical Journal Supplement*, **191**, 423–438 (2010).
- 157 “Evidence for Particle Acceleration to the Knee of the Cosmic Ray Spectrum in Tycho’s Supernova Remnant,” K. A. Eriksen, J. P. Hughes, C. Badenes, R. Fesen, P. Ghavamian, D. Moffett, P. P. Plucinsky, C. E. Rakowski, E. M. Reynoso, P. Slane, *The Astrophysical Journal Letters*, **728**, L28–L32 (2011).
- 158 “The Atacama Cosmology Telescope: A Measurement of the Cosmic Microwave Background Power Spectrum at 148 and 218 GHz from the 2008 Southern Survey,” S. Das, T. Marriage, P. A. R. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, B. Burger, J. Chervenak, M. J. Devlin, S. R. Dicker, W. B. Doriese, J. Dunkley, R. Dünner, T. Essinger-Hileman, R. P. Fisher, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, G. C. Hilton, M. Hilton, A. D. Hincks, R. Hlozek, K. M. Huffenberger, D. H. Hughes, J. P. Hughes, L. Infante, K. D. Irwin, J.-B. Juin, M. Kaul, J. Klein, A. Kosowsky, J. M. Lau, M. Limon, Y.-T. Lin, R. H. Lupton, D. Marsden, K. Martocci, P. Mauskopf, F. Menanteau, K. Moodley, H. Moseley, C. B. Netterfield, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, B. Reid, N. Sehgal, B. D. Sherwin, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, H. Trac, C. Tucker, R. Warne, E. Wollack, and Y. Zhao, *The Astrophysical Journal*, **729** 62–77 (2011).
- 159 “Discovery of TeV Gamma-ray Emission from Tycho’s Supernova Remnant,” V.A. Acciari, E. Aliu, T. Arlen, T. Aune, M. Beilicke, W. Benbow, S. M. Bradbury, J. H. Buckley, V. Bugaev, K. Byrum, A. Cannon, A. Cesarini, L. Ciupik, E. Collins-Hughes,

- W. Cui, R. Dickherber, C. Duke, M. Errando, J. P. Finley, G. Finnegan, L. Fortson, A. Furniss, N. Galante, D. Gall, G. H. Gillanders, S. Godambe, S. Griffin, J. Grube, R. Guenette, G. Gyuk, D. Hanna, J. Holder, J. P. Hughes, C. M. Hui, T. B. Humensky, P. Kaaret, N. Karlsson, M. Kertzman, D. Kieda, H. Krawczynski, F. Krennrich, M. J. Lang, S. LeBohec, A. S. Madhavan, G. Maier, P. Majumdar, S. McArthur, A. McCann, P. Moriarty, R. Mukherjee, R. A. Ong, M. Orr, A. N. Otte, D. Pandel, N. H. Park, J. S. Perkins, M. Pohl, J. Quinn, K. Ragan, L. C. Reyes, P. T. Reynolds, E. Roache, H. J. Rose, D. B. Saxon, M. Schroedter, G. H. Sembroski, G. Senturk, G. Demet; P. Slane, A. W. Smith, G. Tešić, M. Theiling, S. Thibadeau, K. Tsurusaki, A. Varlotta, V. V. Vassiliev, S. Vincent, M. Vivier, S. P. Wakely, J. E. Ward, T. C. Weekes, A. Weinstein, T. Weisgarber, D. A. Williams, M. Wood, B. Zitzer, *The Astrophysical Journal Letters*, **730**, L20–L24 (2011).
- 160 “A *Chandra* Observation of Supernova Remnant G350.1–0.3 and Its Central Compact Object,” I. Lovchinsky, P. Slane, B. M. Gaensler, J. P. Hughes, C.-Y. Ng, J. S. Lazendic, J. D. Gelfand, and C. L. Brogan, *The Astrophysical Journal*, **731**, 70–77 (2011).
- 161 “Atacama Cosmology Telescope: Extragalactic Sources at 148 GHz in the 2008 Survey,” T. Marriage, J.-B. Juin, Y.-T. Lin, D. Marsden, M. R. Nolta, B. Partridge, P. A. R. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, B. Burger, J. Chervenak, S. Das, M. J. Devlin, S. R. Dicker, W. B. Doriese, J. Dunkley, R. Dünner, T. Essinger-Hileman, R. P. Fisher, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, G. C. Hilton, M. Hilton, A. D. Hincks, R. Hlozek, K. M. Huffenberger, D. H. Hughes, J. P. Hughes, L. Infante, K. D. Irwin, M. Kaul, J. Klein, A. Kosowsky, J. M. Lau, M. Limon, R. H. Lupton, K. Martocci, P. Mauskopf, F. Menanteau, K. Moodley, H. Moseley, C. B. Netterfield, M. D. Niemack, L. A. Page, L. Parker, H. Quintana, B. Reid, N. Sehgal, B. D. Sherwin, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, H. Trac, C. Tucker, R. Warne, G. Wilson, E. Wollack, and Y. Zhao, *The Astrophysical Journal*, **731**, 100–114 (2011).
- 162 “SNR 0104–72.3: A Remnant of a Type Ia Supernova in a Star-forming Region?” J.-J. Lee, S. Park, J. P. Hughes, P. O. Slane, and D. N. Burrows, *The Astrophysical Journal Letters*, **731**, L8–L12 (2011).
- 163 “The *Chandra* ACIS Survey of M33 (ChASEM33): The Final Source Catalog,” R. Tüllmann, T. J. Gaetz, P. P. Plucinsky, K. D. Kuntz, B. F. Williams, W. Pietsch, F. Haberl, K. S. Long, W. P. Blair, M. Sasaki, P. F. Winkler, P. Challis, T. G. Pannuti, R. J. Edgar, D. Helfand, J. P. Hughes, R. P. Kirshner, T. Mazeh, and A. Shporer, *The Astrophysical Journal Supplement*, **193**, 31–56 (2011).
- 164 “The Atacama Cosmology Telescope: Sunyaev-Zel’dovich Selected Galaxy Clusters at 148 GHz in the 2008 Survey,” N. Sehgal, H. Trac, V. Acquaviva, P. A. R. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, B. Burger, J. Chervenak, S. Das, M. J. Devlin, S. R. Dicker, W. B. Doriese, J. Dunkley, R. Dünner, T. Essinger-Hileman, R. P. Fisher, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, G. C. Hilton, M. Hilton, A. D.

- Hincks, R. Hlozek, D. Holtz, K. M. Huffenberger, D. H. Hughes, J. P. Hughes, L. Infante, K. D. Irwin, A. Jones, J.-B. Juin, J. Klein, A. Kosowsky, J. M. Lau, M. Limon, Y.-T. Lin, R. H. Lupton, T. A. Marriage, D. Marsden, K. Martocci, P. Mauskopf, F. Menanteau, K. Moodley, H. Moseley, C. B. Netterfield, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, B. Reid, B. D. Sherwin, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, C. Tucker, R. Warne, E. Wollack, and Y. Zhao, *The Astrophysical Journal*, **732**, 44–55 (2011).
- 165 “An *XMM-Newton* Study of the Bright, Nearby Supernova Remnant G296.1–0.5,” D. Castro, P. O. Slane, B. M. Gaensler, J. P. Hughes, and D. J. Patnaude, *The Astrophysical Journal*, **734**, 86–95 (2011).
- 166 “The Effect of a Cosmic Ray Precursor in SN 1006?” C. E. Rakowski, J. M. Laming, U. Hwang, K. A. Eriksen, P. Ghavamian, and J. P. Hughes, *The Astrophysical Journal Letters*, **735**, L21–L25 (2011).
- 167 “The Atacama Cosmology Telescope: Detection of Sunyaev-Zel’Dovich Decrement in Groups and Clusters Associated with Luminous Red Galaxies,” N. Hand, J. W. Appel, N. Battaglia, J. R. Bond, S. Das, M. J. Devlin, J. Dunkley, R. Dünner, T. Essinger-Hileman, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, M. Hilton, A. D. Hincks, R. Hlozek, J. P. Hughes, K. D. Irwin, J. Klein, A. Kosowsky, Y.-T. Lin, T. A. Marriage, D. Marsden, M. McLaren, F. Menanteau, K. Moodley, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, R. Plimpton, E. D. Reese, F. Rojas, N. Sehgal, B. D. Sherwin, J. L. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, H. Trac, K. Visnjic, and E. Wollack, *The Astrophysical Journal*, **736**, 39–48 (2011).
- 168 “Detection of the Power Spectrum of Cosmic Microwave Background Lensing by the Atacama Cosmology Telescope,” S. Das, B. D. Sherwin, P. Aguirre, J. W. Appel, J. R. Bond, C. S. Carvalho, M. J. Devlin, J. Dunkley, R. Dünner, T. Essinger-Hileman, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, A. D. Hincks, R. Hlozek, K. M. Huffenberger, J. P. Hughes, K. D. Irwin, J. Klein, A. Kosowsky, R. H. Lupton, T. A. Marriage, D. Marsden, F. Menanteau, K. Moodley, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, E. D. Reese, B. L. Schmitt, N. Sehgal, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, K. Visnjic and E. Wollack, *Physical Review Letters*, **107**, 021301 [5 pages] (2011).
- 169 “Evidence for Dark Energy from the Cosmic Microwave Background Alone Using the Atacama Cosmology Telescope Lensing Measurements,” B. D. Sherwin, J. Dunkley, S. Das, J. W. Appel, J. R. Bond, C. S. Carvalho, M. J. Devlin, R. Dünner, T. Essinger-Hileman, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, A. D. Hincks, R. Hlozek, J. P. Hughes, K. D. Irwin, J. Klein, A. Kosowsky, T. A. Marriage, D. Marsden, K. Moodley, F. Menanteau, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, E. D. Reese, B. L. Schmitt, N. Sehgal, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, K. Visnjic and E. Wollack, *Physical Review Letters*, **107**, 021302 [5 pages] (2011).
- 170 “Atacama Cosmology Telescope: Calibration with WMAP Using Cross-Correlations,” A. Hajian, V. Aquaviva, P. A. R. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, B. Burger, J. Chervenak, S. Das, M. J.

- Devlin, S. R. Dicker, W. B. Doriese, J. Dunkley, R. Dünner, T. Essinger-Hileman, R. P. Fisher, J. W. Fowler, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, G. C. Hilton, M. Hilton, A. D. Hincks, R. Hlozek, K. M. Huffenberger, D. H. Hughes, J. P. Hughes, L. Infante, K. D. Irwin, J.-B. Juin, M. Kaul, J. Klein, A. Kosowsky, J. M. Lau, M. Limon, Y.-T. Lin, R. H. Lupton, T. A. Marriage, D. Marsden, P. Mauskopf, F. Menanteau, K. Moodley, H. Moseley, C. B. Netterfield, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, B. Reid, N. Sehgal, B. D. Sherwin, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, H. Trac, C. Tucker, R. Warne, E. Wollack, and Y. Zhao *The Astrophysical Journal*, submitted, arXiv1009.0777 (2011).
- 171 “The Atacama Cosmology Telescope: Cosmological Parameters from the 2008 Power Spectra,” J. Dunkley, R. Hlozek, J. Sievers, V. Acquaviva, P. A. R. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, B. Burger, J. Chervenak, S. Das, M. J. Devlin, S. R. Dicker, W. B. Doriese, R. Dünner, T. Essinger-Hileman, R. P. Fisher, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, G. C. Hilton, M. Hilton, A. D. Hincks, K. M. Huffenberger, D. H. Hughes, J. P. Hughes, L. Infante, K. D. Irwin, J.-B. Juin, M. Kaul, J. Klein, A. Kosowsky, J. M. Lau, M. Limon, Y.-T. Lin, R. H. Lupton, T. A. Marriage, D. Marsden, P. Mauskopf, F. Menanteau, K. Moodley, H. Moseley, C. B. Netterfield, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, B. Reid, N. Sehgal, B. Sherwin, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, H. Trac, C. Tucker, R. Warne, E. Wollack, and Y. Zhao, *The Astrophysical Journal*, submitted, arXiv:1009.0866 (2011).
- 172 “The Atacama Cosmology Telescope: Sunyaev-Zel’dovich Selected Galaxy Clusters at 148 GHz in the 2008 Survey,” T. Marriage, P. A. R. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, B. Burger, J. Chervenak, S. Das, M. J. Devlin, S. R. Dicker, W. B. Doriese, J. Dunkley, R. Dünner, T. Essinger-Hileman, R. P. Fisher, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, C. Hernández-Monteagudo, G. C. Hilton, M. Hilton, A. D. Hincks, R. Hlozek, K. M. Huffenberger, D. H. Hughes, J. P. Hughes, L. Infante, K. D. Irwin, J.-B. Juin, M. Kaul, J. Klein, A. Kosowsky, J. M. Lau, M. Limon, Y.-T. Lin, R. H. Lupton, D. Marsden, K. Martocci, P. Mauskopf, F. Menanteau, K. Moodley, H. Moseley, C. B. Netterfield, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, H. Quintana, B. Reid, N. Sehgal, B. D. Sherwin, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, H. Trac, C. Tucker, R. Warne, G. Wilson, E. Wollack, and Y. Zhao, *The Astrophysical Journal*, submitted, arXiv:1010.1065 (2011).
- 173 “Correlations in the (Sub)millimeter background from ACTxBLAST,” A. Hajian, M. P. Viero, G. Addison, P. Aguirre, J. W. Appel, N. Battaglia, J. J. Bock, J. R. Bond, S. Das, M. J. Devlin, S. R. Dicker, J. Dunkley, R. Dünner, T. Essinger-Hileman, J. P. Hughes, J. W. Folwer, M. Halpern, M. Hasselfield, M. Hilton, A. D. Hincks, R. Hlozek, K. D. Irwin, J. Klein, A. Kosowsky, Y.-T. Lin, T. A. Marriage, D. Marsden, G. Marsden, F. Menanteau, L. Moncelsi, K. Moodley, C. B. Netterfield, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, D. Scott, N. Sehgal, J. Sievers, D. N.

- Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, and E. Wollack, *The Astrophysical Journal*, submitted, arXiv1101.1517 (2011).
- 174 “The Atacama Cosmology Telescope: a Measurement of the Primordial Power Spectrum,” R. Hlozek, J. Dunkley, G. Addison, J. W. Appel, J. R. Bond, C. S. Carvalho, S. Das, M. J. Devlin, R. Dünner, T. Essinger-Hileman, J. W. Fowler, P. Gallardo, A. Hajian, M. Halpern, M. Hasselfield, M. Hilton, A. D. Hincks, J. P. Hughes, K. D. Irwin, J. Klein, A. Kosowsky, T. A. Marriage, D. Marsden, F. Menanteau, K. Moodley, M. D. Niemack, M. R. Nolta, L. A. Page, L. Parker, B. Partridge, F. Rojas, N. Sehgal, B. Sherwin, J. Sievers, D. N. Spergel, S. T. Staggs, D. S. Swetz, E. R. Switzer, R. Thornton, and E. Wollack, *The Astrophysical Journal*, submitted, arXiv:1105.4887 (2011).
- 175 “A Radio Polarization Study of SN1006,” E. M. Reynoso, J. P. Hughes, and D. A. Moffett, *The Astrophysical Journal*, in prep.
- 176 “The Atacama Cosmology Telescope: The Exceptional Cluster ACT-CL J0102–4915 at $z=0.87$,” F. Menanteau, J. P. Hughes, et al., *The Astrophysical Journal*, in prep.
- 177 “The Atacama Cosmology Telescope: Dynamical Masses and Scaling Relations for a Sample of Massive Sunyaev-Zel’dovich Selected Clusters,” C. Sifón, J. González, F. Menanteau, L. F. Barrientos, J. P. Hughes, L. Infante, et al., *The Astrophysical Journal*, in prep.

Conference Proceedings (mostly non-refereed publications)

- 1988 “X-Ray Observations of SNR E0102.2-72.2 in the SMC,” J. P. Hughes, *IAU Colloquium 101, The Interaction of Supernova Remnants With the Interstellar Medium*, ed. R. S. Roger and T. L. Landecker, 125–128.
- 1988 “*Einstein* Bragg Crystal Spectrometer Observations of Cas A – A Two Region, Non-equilibrium Ionization Interpretation,” T. H. Markert, P. L. Blizzard, C. R. Canizares, and J. P. Hughes, *IAU Colloquium 101, The Interaction of Supernova Remnants With the Interstellar Medium*, ed. R. S. Roger and T. L. Landecker, 129–132.
- 1988 “Derivation of Requirements for Calibrating the Advanced X-Ray Astrophysics Facility (*AXAF*) Telescope,” J. P. Hughes, D. A. Schwartz, D. M. Worrall, and M. V. Zombeck, *SPIE Proceedings Vol. 982, X-Ray Instrumentation in Astronomy II*, ed. L. Golub, 380–386.
- 1990 “Observing the X-Ray Evolution of SN1987A with *AXAF* and Other Future Instruments,” P. Gorenstein, P. Pinto, J. Hughes, and W. Tucker, *Proceedings of the ESO/EIPC Workshop on Supernova 1987A and Other Supernovae*, eds. I. J. Danziger & K. Kjär, 499–508.
- 1991 “X-Ray Spectroscopy of Young Supernova Remnants: Mixing in the Ejecta of Type I and II Supernovae,” J. P. Hughes, *Supernovae, The Tenth Santa Cruz Summer Workshop in Astronomy and Astrophysics*, ed. S. Woosley, 661–670.
- 1991 “Observations of Molecular Clouds Associated with Supernova Remnants in the LMC,” J. P. Hughes, L. Bronfman, and L. Nyman, *Supernovae, The Tenth Santa Cruz Summer Workshop in Astronomy and Astrophysics*, ed. S. Woosley, 679–682.

- 1991 "ROSAT," T. Chlebowski, J. P. Hughes, and A. Siemiginowska, *Postepy Astron.*, Tom 39, Zesz. 1, 15–17 (in Polish).
- 1991 "The Spatial Distribution of Iron in the Coma Cluster of Galaxies," J. P. Hughes, *Iron Line Diagnostics in X-Ray Sources*, (Springer-Verlag Lecture Notes in Physics), eds. A. Treves, G. C. Perola, & L. Stella, 80–83.
- 1991 "Use of the Sunyaev-Zel'dovich Effect to Determine Distances to Abell 665 and 2218," J. P. Hughes, and M. Birkinshaw, *Proceedings of the NATO ASI on Clusters and Superclusters of Galaxies (Contributed Talks and Poster Papers)*, ed. M. M. Colless, A. Babul, A. C. Edge, R. M. Johnstone, and S. Raychaudhury, 73–74.
- 1991 "Feasibility Study of the Use of Synchrotron Radiation in the Calibration of AXAF: Initial Reflectivity Results," D. E. Graessle, R. J. Brissenden, J. Cobuzzi, J. P. Hughes, E. M. Kellogg F. E. Mootz, D. A. Schwartz, P. O. Slane, M. V. Zombeck, R. L. Blake, and J. Davis, *SPIE Proceedings Vol. 1546, Multilayer and Grazing Incidence X-Ray/EUV Optics*, ed. R. B. Hoover, 13–25.
- 1991 "Calibration of the Verification Engineering Test Article-I (VETA-I) for AXAF using the VETA-I X-Ray Detection System (VXDS)," E. Kellogg, R. Brissenden, K. Flanagan, M. Freeman, J. Hughes, M. Jones, M. Ljungberg, P. McKinnon, W. Podgorski, D. Schwartz, and M. Zombeck, *SPIE Proceedings Vol. 1546, Multilayer and Grazing Incidence X-Ray/EUV Optics*, ed. R. B. Hoover, 2–13.
- 1991 "Uniformity and Transmission of Proportional Counter Window Materials for Use with AXAF," K. A. Flanagan, G. K. Austin, J. P. Cobuzzi, R. Goddard, J. P. Hughes, E. R. McLaughlin, W. A. Podgorski, V. Rose, A. G. Roy, M. V. Zombeck, T. H. Markert, J. Bauer, T. Isobe, M. L. Schattenburg, *SPIE Proceedings Vol. 1549, EUV, X-Ray, and Gamma-Ray Instrumentation for Astronomy II*, eds. O. H. Siegmund & R. E. Rothschild, 395–407.
- 1991 "Non-Polytropic Model for the Coma Cluster," R. Fusco-Femiano, and J. P. Hughes, Abstracts of the International Workshop on *Galaxy Environments and the Large Scale Structure of the Universe*, (SISSA, Trieste, Italy), eds. G. Giuricin, F. Mardirossian, & M. Mezzetti.
- 1992 "Clusters of Galaxies," J. P. Hughes, invited review in *Ginga Memorial Symposium – From Ginga to ASTRO-D and Further to DUET*, ISAS Symposium on Astrophysics 1992, (ISAS, Tokyo, Japan), eds. F. Makino & F. Nagase, 104–113.
- 1992 "Correcting X-Ray Spectra Obtained from the AXAF VETA-I Mirror Calibration for Pileup, Continuum, Background, and Deadtime," G. Chartas, K. A. Flanagan, J. P. Hughes, E. M. Kellogg, D. T. Nguyen, M. V. Zombeck, M. K. Joy, and J. J. Kolodziejczak, *SPIE Proceedings Vol. 1742, Multilayer and Grazing Incidence X-Ray/EUV Optics for Astronomy and Projection Lithography*, eds. R. B. Hoover & A. B. C. Walker, Jr., 65–74.
- 1992 "AXAF VETA-I Mirror Encircled Energy Measurements and Data Reduction," P. Zhao, M. D. Freeman, J. P. Hughes, E. M. Kellogg, D. T. Nguyen, M. K. Joy, and J. J. Kolodziejczak, *SPIE Proceedings Vol. 1742, Multilayer and Grazing Incidence X-Ray/EUV Optics for Astronomy and Projection Lithography*, eds. R. B. Hoover & A. B. C. Walker, Jr., 75–90.

- 1992 "Precision of the Calibration of the *AXAF* Engineering Test Article (VETA) Mirrors," D. A. Schwartz, G. Chartas, J. P. Hughes, E. M. Kellogg, and P. Zhao, *SPIE Proceedings Vol. 1742, Multilayer and Grazing Incidence X-Ray/EUV Optics for Astronomy and Projection Lithography*, eds. R. B. Hoover & A. B. C. Walker, Jr., 116–135.
- 1992 "Image Analysis of the *AXAF* VETA-I X-Ray Mirror," M. D. Freeman, J. P. Hughes, L. P. Van Speybroeck, J. W. Bilbro, and M. C. Weisskopf, *SPIE Proceedings Vol. 1742, Multilayer and Grazing Incidence X-Ray/EUV Optics for Astronomy and Projection Lithography*, eds. R. B. Hoover & A. B. C. Walker, Jr., 136–151.
- 1992 "Surface Finish Quality of the Outer *AXAF* Mirror Pair Based on X-ray Measurements of the VETA-I," J. P. Hughes, D. A. Schwartz, A. H. Szentgyorgyi, L. P. Van Speybroeck, and P. Zhao, *SPIE Proceedings Vol. 1742, Multilayer and Grazing Incidence X-Ray/EUV Optics for Astronomy and Projection Lithography*, eds. R. B. Hoover & A. B. C. Walker, Jr., 152–161.
- 1992 "X-ray Evidence for Particulate Contamination on the *AXAF* VETA-I Mirrors," S. L. O'Dell, R. F. Elsner, J. J. Kolodziejczak, M. C. Weisskopf, J. P. Hughes, and L. P. Van Speybroeck, *SPIE Proceedings Vol. 1742, Multilayer and Grazing Incidence X-Ray/EUV Optics for Astronomy and Projection Lithography*, eds. R. B. Hoover & A. B. C. Walker, Jr., 171–182.
- 1992 "The X-Ray Reflectivity of the *AXAF* VETA-I Optics," E. M. Kellogg, J. P. Hughes, L. P. Van Speybroeck, P. Zhao, M. C. Weisskopf, R. F. Elsner, and S. L. O'Dell, *SPIE Proceedings Vol. 1742, Multilayer and Grazing Incidence X-Ray/EUV Optics for Astronomy and Projection Lithography*, eds. R. B. Hoover & A. B. C. Walker, Jr., 183–190.
- 1994 "X-Ray Observations of the Sunyaev-Zel'dovich Decrement Clusters Abell 665 and CL0016+16," J. P. Hughes, and M. Birkinshaw, Proceedings of the 37th Yamada Conference, *Evolution of the Universe and its Observational Quest*, ed., K. Sato, 455–456.
- 1994 "Detection of X-rays from SN 1987A with *ROSAT*," P. Gorenstein, J. P. Hughes, and W. H. Tucker, *The Soft X-Ray Cosmos, ROSAT* Science Symposium, eds., E. M. Schlegel & R. Petre, 205–210.
- 1994 "*ROSAT* HRI Observations of Magellanic Cloud Supernova Remnants," J. P. Hughes, *The Soft X-Ray Cosmos, ROSAT* Science Symposium, eds., E. M. Schlegel & R. Petre, 144–153.
- 1994 "Complex Spatial Structures in Sunyaev-Zel'dovich Decrement Clusters Abell 665 and CL0016+16," J. P. Hughes, and M. Birkinshaw, *The Soft X-Ray Cosmos, ROSAT* Science Symposium, eds., E. M. Schlegel & R. Petre, 378–379.
- 1994 "First Results from *ASCA* Observations of the Large Magellanic Cloud Supernova Remnant Sample," J. P. Hughes, C. Canizares, D. Helfand, U. Hwang, M. Itoh, R. Kirshner, K. Koyama, T. Markert, H. Tsunemi, and J. Woo, in the Proceedings of the conference *New Horizon of X-Ray Astronomy: First Results from ASCA*, (Universal Academy Press: Tokyo), eds. F. Makino & F. Nagase, 119–124.

- 1994 "ASCA Observations of E0102–72: Plasma Diagnostics of a SNR in the SMC," I. Hayashi, K. Koyama, M. Ozaki, E. Miyata, H. Tsunemi, J. P. Hughes, and R. Petre, in the Proceedings of the conference *New Horizon of X-Ray Astronomy: First Results from ASCA*, (Universal Academy Press: Tokyo), eds. F. Makino & F. Nagase, 467–468.
- 1995 "The SAO AXAF Simulation System," D. Jerius, M. Freeman, T. Gaetz, J. P. Hughes, and W. Podgorski, *Astronomical Data Analysis Software and Systems IV*, Astronomical Society of the Pacific Conference Series Volume 77, eds. R. A. Shaw, H. E. Payne, & J. J. E. Hayes, 357–360.
- 1996 "ASCA Observations of Distant Clusters of Galaxies," T. Tsuru, K. Koyama, J. P. Hughes, N. Arimoto, T. Kii, and M. Hattori, in the Proceedings of the Eleventh Colloquium on UV & X-Ray Spectroscopy of Astrophysical and Laboratory Plasmas, (Universal Academy Press: Tokyo), eds. K. Yamashita & T. Watanabe, 375–378.
- 1996 "ASCA Observations of Supernova Remnants in the Magellanic Clouds," I. Hayashi, K. Koyama, J. P. Hughes, and T. Murakami, in the Proceedings of the Eleventh Colloquium on UV & X-Ray Spectroscopy of Astrophysical and Laboratory Plasmas, (Universal Academy Press: Tokyo), eds. K. Yamashita & T. Watanabe, 319–322.
- 1996 "Analysis of Iridium Reflectance Measurements for AXAF Witness Mirrors from 2–12 keV," J. J. Fitch, D. E. Graessle, B. Harris, J. P. Hughes, D. T. Nguyen, D. A. Schwartz, and R. L. Blake, *SPIE Proceedings Vol. 2805, Multilayer and Grazing Incidence X-Ray/EUV Optics III*, eds. R. B. Hoover & A. B. C. Walker, Jr., 311–322.
- 1997 "ASCA Observations of Distant Clusters of Galaxies," T. Tsuru, K. Koyama, J. P. Hughes, N. Arimoto, T. Kii, and M. Hattori, in the Proceedings of the International Conference on X-Ray Astronomy – ASCA 3rd Anniversary – *X-Ray Imaging and Spectroscopy of Cosmic Hot Plasmas*, (Universal Academy Press: Tokyo), eds. F. Makino & K. Mitsuda, 129–130.
- 1997 "ASCA Spectroscopy of SNRs in the Magellanic Clouds," I. Hayashi, K. Koyama, J. P. Hughes, and T. Murakami, in the Proceedings of the International Conference on X-Ray Astronomy – ASCA 3rd Anniversary – *X-Ray Imaging and Spectroscopy of Cosmic Hot Plasmas*, (Universal Academy Press: Tokyo), eds. F. Makino & K. Mitsuda, 363–366.
- 1997 "The Evolutionary State of SNR G299.2–2.9," P. Slane, O. Vancura, and J. P. Hughes, in the Proceedings of the International Conference on X-Ray Astronomy – ASCA 3rd Anniversary – *X-Ray Imaging and Spectroscopy of Cosmic Hot Plasmas*, (Universal Academy Press: Tokyo), eds. F. Makino & K. Mitsuda, 391–392.
- 1997 "The Expansion of the X-Ray Remnant of Tycho's Supernova (SN1572)," J. P. Hughes, in the Proceedings of the International Conference on X-Ray Astronomy – ASCA 3rd Anniversary – *X-Ray Imaging and Spectroscopy of Cosmic Hot Plasmas*, (Universal Academy Press: Tokyo), eds. F. Makino & K. Mitsuda, 359–362.
- 1998 "Revisiting the Mass of the Coma Cluster from X-Ray Observations," J. P. Hughes, in the Proceedings of the conference *Untangling Coma Berenices: A New Vision of an Old Cluster* (World Scientific: Singapore), eds. A. Mazure, F. Casoli, F. Durret, & D. Gerbal, 175–178.

- 1998 “Studying Composite Supernova Remnants: the Example of MSH 11–62,” I. M. Harrus, J. P. Hughes, P. O. Slane, *Mem. Soc. Astron. Ital.*, **69**, 871–876.
- 1998 “Hot Electrons and Cold Photons: Galaxy Clusters and the Sunyaev-Zel’dovich Effect,” in the Proceedings of IAU Symposium No. 188, “The Hot Universe,” (Kluwer: Netherlands), eds. K. Koyama et al., 189–192.
- 1999 “X-ray Spectroscopy of the Supernova Remnant N103B,” U. Hwang, R. Petre, E. V. Gotthelf, J. P. Hughes, and J. Keohane, in the Proceedings of IAU Symposium No. 190, “New Views of the Magellanic Clouds,” eds., Y.-H. Chu, N. Suntzeff, J. Hesser, & D. Bohlender, 141–142.
- 2000 “Early Results from *Chandra* Observations of Supernova Remnants,” D. N. Burrows, E. Michael, U. Hwang, R. Chevalier, G. P. Garmire, S. S. Holt, J. P. Hughes, K. Lewis, R. McCray, J. A. Nousek, R. Petre, C. Rakowski, P. Slane, and L. Townsley, *SPIE Proceedings Vol. 4012, X-Ray Optics, Instruments, and Missions III*, eds. J. E. Trümper & B. Aschenbach, 91–100.
- 2001 “Exploring the Small-Scale Structure of N103B,” K. T. Lewis, D. N. Burrows, J. A. Nousek, G. P. Garmire, P. O. Slane, and J. P. Hughes, in “Young Supernova Remnants” Eleventh Astrophysics Conference (Melville, NY: AIP), eds. S. S. Holt & U. Hwang, 181–184.
- 2001 “Nonthermal X-ray Emission from G266.2–1.2 (RX J0852.0–4622).” P. Slane, J. P. Hughes, R. J. Edgar, P. P. Plucinsky, H. Tsunemi, E. Miyata, and B. Aschenbach, in “Young Supernova Remnants” Eleventh Astrophysics Conference (Melville, NY: AIP), eds. S. S. Holt & U. Hwang, 403–406.
- 2001 “Young Supernova Remnants in the Magellanic Clouds,” J. P. Hughes, in “Young Supernova Remnants” Eleventh Astrophysics Conference (Melville, NY: AIP), eds. S. S. Holt & U. Hwang, 419–428.
- 2002 “The Small Scale Structure of N103B: Nature or Nurture?” K. T. Lewis, D. N. Burrows, G. P. Garmire, J. A. Nousek, J. P. Hughes, and P. O. Slane, in “The High Energy Universe at Sharp Focus: *Chandra* Science,” ASP Conference Series, Vol. 262, eds. E. M. Schlegel & S. D. Vrtilek, 323–329.
- 2003 “3-D GRMHD Simulations of Generating Jets,” K.-I. Nishikawa, G. Richardson, R. Preece, G. J. Fishman, S. Koide, K. Shibata, T. Kudoh, H. Sol, L. X. Li, J. P. Hughes, P. Hardee, and R. Blanford, in “Active Galactic Nuclei: from Central Engine to Host Galaxy” ASP Conference Series, Vol. 290, eds. S. Collin, F. Combes, & I. Shlosman, 353–354.
- 2004 “The Role of Modeling in the Calibration of the *Chandra*’s Optics,” D. Jerius, L. Cohen, R. J. Edgar, M. Freeman, T. J. Gaetz, J. P. Hughes, D. Nguyen, W. A. Podgorski, M. Tibbetts, L. P. Van Speybroeck, and P. Zhao, *SPIE Proceedings Vol. 5165, X-Ray and Gamma-Ray Instrumentation for Astronomy XIII*, eds. K. A. Flanagan & O. H. W. P. Siegmund, 402–410.
- 2004 “An X-Ray Pulsar, Metal-rich Ejecta, and Shocked Ambient Medium in the Supernova Remnant G292.0+1.8,” J. P. Hughes, R. B. Friedman, P. Slane, and S. Park, in “Young Neutron Stars and Their Environments,” IAU Symposium 218, eds., F. Camilo & B. M. Gaensler, 199–202.

- 2004 “*Chandra* Study of the Central Object Associated with the Supernova Remnant MSH 11–62,” I. Harrus, J. P. Bernstein, P. O. Slane, B. Gaensler, J. P. Hughes, D. Moffett, R. Dodson, in “Young Neutron Stars and Their Environments,” IAU Symposium 218, eds., F. Camilo & B. M. Gaensler, 203–206.
- 2004 “Radio Expansion Studies of Two Historical Supernova Remnants: SN 1006 and SN 1572,” D. Moffett, C. Caldwell, E. Reynoso, and J. P. Hughes, in “Young Neutron Stars and Their Environments,” IAU Symposium 218, eds., F. Camilo & B. M. Gaensler, 68–71.
- 2004 “X-Ray Observations of the Most Massive DLS Shear-Selected Galaxy Clusters,” J. P. Hughes, I. Dell’Antonio, J. Hennawi, V. Margoniner, S. Molnar, D. Norman, D. Spergel, J. A. Tyson, G. Wilson, and D. Wittman, in “Multiwavelength Cosmology” Astrophysics and Space Science Library V. 301, ed., M. Plionis, 255–258.
- 2005 “Exploring the Physics of Type Ia Supernovae Through the X-ray Spectra of their Remnants,” C. Badenes, K. J. Borkowski, E. Bravo, J. P. Hughes, and U. Hwang, Mem. Soc. Astron. Ital., **76**, 555–559.
- 2006 “*XMM-Newton* analysis of the supernova remnant W44,” I. Harrus, R. Smith, P. Slane, and J. P. Hughes, in the Proceedings of the “The X-ray Universe 2005,” ESA SP-604, ed. A. Wilson, 369–370.
- 2007 “A Physical Interpretation of the Jet-Like X-ray Emission from Supernova Remnant W49B,” M. Miceli, A. Decourchelle, J. Ballet, F. Bocchino, J. P. Hughes, U. Hwang, and R. Petre, in “The Multicolored Landscape of Compact Objects and their Explosive Origins” American Institute of Physics Conference Proceedings, V. 924, 129–134.
- 2007 “*Suzaku* Observation of TeV SNR RX J1713.7–3946,” T. Takahashi, T. Tanaka, Y. Uchiyama, J. S. Hiraga, K. Nakazawa, S. Watanabe, A. Bamba, J. P. Hughes, H. Katagiri, J. Kataoka, M. Kokubun, K. Koyama, K. Mori, R. Petre, H. Takahashi, and Y. Tsuboi, *Progress of Theoretical Physics Supplement*, **169**, 157–161
- 2007 “Millenium Study of SN 1006 with *Suzaku*,” A. Bamba, H. Yamaguchi, K. Koyama, J. S. Hiraga, S. Holt, J. P. Hughes, H. Katagiri, J. Kataoka, S. Kitamoto, M. Kokubun, H. Matumoto, E. Miyata, K. Mori, H. Nakajima, M. Ozaki, R. Petre, A. Sekiguchi, T. Takahashi, T. Tanaka, Y. Terada, H. Tomida, H. Tsunemi, Y. Tsuboi, M. Tsumimoto, Y. Uchiyama, M. Ueno, and S. Watanabe, *Progress of Theoretical Physics Supplement*, **169**, 142–145
- 2007 “*Suzaku* Observation of the CNO Emission Lines from the Cygnus Loop,” E. Miyata, J. P. Hughes, M. Kokubun, F. S. Porter, K. Masai and the *Suzaku* Team, *Progress of Theoretical Physics Supplement*, **169**, 92–96
- 2007 “*Suzaku* Observations of Abell 1795: Cluster Emission to r_{200} ,” M. Bautz, E. Miller, K. Arnaud, S. Porter, K. Hayashida, P. Henry, J. P. Hughes, M. Kawaharada, K. Makishima, K. Sato, J. Sanders, and T. Tamura, *Progress of Theoretical Physics Supplement*, **169**, 20–24
- 2008 “Mass Loss from the Progenitor of SN 1006?” E. M. Reynoso, G. Castelletti, D. A. Moffett, and J. P. Hughes, Revista Mexicana de Astronomia y Astrofisica Conference Series, **33**, 157–158.

- 2009 “The End of Amnesia: Measuring the Metallicities of Type Ia SN Progenitors with Manganese Lines in Supernova Remnants,” C. Badenes, E. Bravo, and J. P. Hughes, American Institute of Physics Conference Series, V. 1111, 307–310.
- 2010 “ACTPol: A polarization-sensitive receiver for the Atacama Cosmology Telescope,” M. D. Niemack, P. A. R. Ade, J. Aguirre, F. Barrientos, J. A. Beall, J. R. Bond, J. Britton, H. M. Cho, S. Das, M. J. Devlin, S. Dicker, J. Dunkley, R. Dünner, J. W. Fowler, A. Hajian, M. Halpern, M. Hasselfield, G. C. Hilton, M. Hilton, J. Hubmayr, J. P. Hughes, L. Infante, K. D. Irwin, N. Jarosik, J. Klein, A. Kosowsky, T. A. Marriage, J. McMahon, F. Menanteau, K. Moodley, J. Nibarger, M. R. Nolta, L. A. Page, B. Partridge, E. Reese, J. Sievers, D. N. Spergel, S. T. Staggs, R. Thornton, C. Tucker, E. Wollack, and K. W. Yoon, *SPIE Proceedings Vol. 7741, Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy V.*, eds. W. S. Holland & J. Zmuidzinas, pp. 7741S-1–7741S-21.
- 2010 “The ASTRO-H Mission,” T. Takahashi, et al., *SPIE Proceedings Vol. 7732, Space Telescopes and Instrumentation 2010: Ultraviolet to Gamma Ray*, eds. M. Arnaud, S. S. Murray, & T. Takahashi, pp. 77320Z-1–77320Z-18.

Book Chapters

- 2005 “Six Years of *Chandra* Observations of Supernova Remnants,” M. C. Weisskopf and J. P. Hughes, Astrophysics Update 2, ed. J. W. Mason, (Springer: Berlin), 55–113

Reports/White Papers

- 1990 “X-Ray Alignment of the VETA-I and Studies of the VETA-I FWHM Measurements,” J. P. Hughes, and W. Podgorski, SAO *AXAF Report 90-040*.
- 1991 “*AXAF* VETA-I X-Ray Testing: Quick Look Results,” R. J. V. Brissenden, J. P. Hughes, E. M. Kellogg, and P. Zhao, SAO *AXAF Report AR-91-080*.
- 1992 “*AXAF* VETA-I X-Ray Testing: Preliminary Analysis Report,” R. J. V. Brissenden, G. Chartas, J. P. Hughes, E. M. Kellogg, and P. Zhao, SAO *AXAF Report AR-92-002*.
- 1994 “HRMA Calibration Handbook: EKC Gravity Compensated XRCF Models,” D. Jerius, and J. P. Hughes, SAO *AXAF Report SAO-AXAF-DR-94-088*.
- 1995 “HRMA Calibration Handbook: Volume II – *AXAF* Specification Mirror Performance,” D. Jerius, and J. P. Hughes, SAO *AXAF Report SAO-AXAF-DR-95-144*.
- 1996 “The High Throughput X-ray Spectroscopy (HTXS) Mission,” prepared by the HTXS Science Working Group, an interim report to NASA, 30 May.
- 1999 “Science with *Constellation-X*,” prepared by the *Constellation-X Facility* Science Team, a booklet distributed at the 193rd AAS meeting (Jan 5–9, Austin, TX).
- 1999 “U.S.–European–Japanese Workshop on Space Cooperation: Summary Report,” prepared by the Space Research Council (Science Council of Japan), European Space Science Committee (European Science Foundation), and Committee on International Space Programs (National Research Council), (National Academy Press: Washington, D.C.).

- 2005 "Science with *Constellation-X*," prepared by the *Constellation-X Facility* Science Team, NASA/TP-2005-212784.
- 2009 "Formation of the Elements," J. P. Hughes, et al., an Astro2010 white paper.
- 2009 "Supernovae and Their Consequences: Studies with the *Generation-X* Mission," P. Slane, et al., an Astro2010 white paper.
- 2009 "Reading the Metal Diaries of the Universe: Tracing Cosmic Chemical Evolution," D. Hartmann, et al., an Astro2010 white paper.
- 2010 "The Herschel-SPIRE Legacy Survey (HSLS): the scientific goals of a shallow and wide submillimeter imaging survey with SPIRE," A. Coorey, et al., White paper supplement to the proposal submitted by the HSLS science team to ESA for Herschel open-time programs, (arXiv:1007.3519)

Electronic Publications

- 2001 "*Chandra* Spectroimager of the Galaxy Cluster Abell 1995," J. P. Hughes, S. K. Patel, M. Joy, and J. E. Carlstrom, in the proceedings of the XXXVIth Rencontres de Moriond Galaxy Clusters and the High-Redshift Universe Observed in X-rays, ed., D. M. Neumann, published on the World-Wide-Web at the URL: http://www-dapnia.cea.fr/Conferences/Morion_astro_2001/index.html
- 2002 "A Catalog of ROSAT X-ray Images of Magellanic Cloud Supernova Remnants," E. Glikman, and J. P. Hughes, published on the World-Wide-Web at the URL: http://www.physics.rutgers.edu/~jackph/science/MCSNRs_atlas.html.
- 2008 "Secondary Fe-peak nuclei in the Tycho Supernova Remnant," C. Badenes, E. Bravo, and J. P. Hughes, in the Proceedings of the 10th Symposium on Nuclei in the Cosmos (NIC X), published on the World-Wide-Web at the URL: <http://pos.sissa.it/cgi-bin/reader/conf.cgi?confid=53>

IAU Circulars/Telegrams

- 1997 *ASCA* detection of GRB 970228, A. Yoshida, N. Kawai, C. Otani, F. Tokanai, H. Inoue, T. Murakami, F. Nagase, R. Shibata, Y. Ueda, S. Holt, L. Piro, E. Costa, J. Heise, and J. Hughes, IAU Circular No. 6593 (1997 March 19).
- 2010 Optical spectroscopy of XMMU J115113.3–623730 = Nova Cen 2008, J. P. Hughes, P. Slane, B. Posselt, P. Charles, A. Rajoelimanana, R. Sefako, J. Halpern, and D. Steeghs, ATel # 2771, (2010, August 4).

Invited Presentations (since 1994)

- 1994 "ASCA Guest Observer Program and First Supernova Remnant Results," invited talk at the 183rd meeting of the American Astronomical Society (11–15 January, Washington, DC) (*Bull. Amer. Astr. Soc.*, **25**, 1430).
- 1994 "Using the Sunyaev-Zel'dovich Effect in Galaxy Clusters for Determining the Hubble Constant: Recent Progress and Future Promise," seminar at the Department of Astronomy, Yale University (8 April, New Haven, CT).

- 1994 “X-ray Observations of Remnants of Type Ia SNe in the Local Group,” invited talk at the 1994 Meeting of the AAS High Energy Astrophysics Division (2–5 November, Napa Valley, CA).
- 1994 “Abundance Determinations from X-ray Observations of SNRs,” seminar to the CfA Supernova Remnant Group, (9 November, Cambridge, MA).
- 1995 “Using the Sunyaev-Zel’dovich Effect in Galaxy Clusters to Determine the Hubble Constant: Recent Progress and Future Promise,” seminar at the Department of Physics and Astronomy, Rutgers University (23 March, Piscataway, NJ).
- 1995 “X-ray Observations of Remnants of Type Ia Supernovae in the Local Group,” seminar at the Department of Astronomy, Columbia University (27 April, New York, NY).
- 1995 “X-Ray Observations of Remnants of Type Ia Supernovae,” invited lecture at the NATO ASI on Thermonuclear Supernovae, (20–30 June, Parador d’Aiguablava, Begur, Spain).
- 1995 “Physical Processes in Shocked Plasmas,” invited talk at the *AXAF* Science Center Workshop “Rates, Codes, and Astrophysics,” (17–20 July, Cambridge, MA).
- 1996 “The Expansion of Tycho’s Supernova Remnant,” seminar to the CfA Supernova Remnant Group, (29 January, Cambridge, MA).
- 1996 “Supernova Remnants and Cosmic Abundances,” invited presentation at the High Throughput X-Ray Spectroscopy Workshop, (29 September–1 Oct, Boston, MA).
- 1996 “Untangling the Riddle of the Supernova Remnant W44,” seminar at the NASA/GSFC Laboratory for High Energy Astrophysics, (26 November, Greenbelt, MD).
- 1997 “X-rays from Young SNRs,” invited talk at the Minnesota SNR Workshop “ 10^{51} Ergs: The Evolution of Shell SNRs,” (23–26 March, Minneapolis, MN).
- 1997 “Recent X-ray Observations of Supernova Remnants,” invited talk at the 190th meeting of the American Astronomical Society (9–12 June, Winston-Salem, NC) (*Bull. Amer. Astr. Soc.*, **29**, 827).
- 1997 “X-ray Observations of Supernova Remnants,” invited talk at the conference “Supernova Explosions: Their Causes and Consequences,” (5–9 August, Institute for Theoretical Physics, Santa Barbara, CA).
- 1997 “Hot Electrons and Cold Photons: Galaxy Clusters and the Sunyaev-Zel’dovich Effect,” invited talk at IAU Symposium No. 188, “The Hot Universe,” (26–30 August, Kyoto, Japan).
- 1997 “Hot Electrons and Cold Photons: Galaxy Clusters and the Sunyaev-Zel’dovich Effect,” Pennsylvania State University, Astronomy and Astrophysics Colloquium (8 October, University Park, PA).
- 1998 “Hot Electrons and Cold Photons: Galaxy Clusters and the Sunyaev-Zel’dovich Effect,” University of Pennsylvania, Astronomy and Astrophysics Colloquium (6 March, Philadelphia, PA).
- 1998 “Hot Electrons and Cold Photons: Galaxy Clusters and the Sunyaev-Zel’dovich Effect,” Columbia University, Physics Colloquium (3 April, New York, NY).

- 1998 “Understanding Plasmas in Galaxy Clusters,” invited talk at the 1998 Joint APS/AAPT meeting (18–21 April, Columbus, OH).
- 1998 “Supernovae and their Remnants,” invited talk at the 192nd meeting of the AAS (8–11 June, San Diego, CA) (*Bull. Amer. Astr. Soc.*, **30**, 876).
- 1999 “Thermal X-ray Emission of Supernova Remnants: the View from *ASCA* and *ROSAT* to *Astro-E*,” invited talk at the *ASCA* Symposium on “Heating and Acceleration in the Universe” (17–19 March, Tokyo, Japan).
- 1999 “Using Supernova Remnants in the Large Magellanic Cloud to Probe Evolution, Progenitors, and the Interstellar Medium,” seminar to the Princeton ISM group, (2 April, Princeton, NJ).
- 1999 “U.S. Views on the *ASCA* Mission,” invited review at the Workshop on U.S.-European-Japanese Cooperation in Space Research (19–21 May, Tokyo, Japan).
- 1999 “How the Intrinsic Shapes of Galaxy Clusters Influence Distance Determinations using the SZ Effect,” invited talk at the 194th meeting of the AAS (30 May–3 June, Chicago, IL) (*Bull. Amer. Astr. Soc.*, **31**, 915).
- 2000 “Nucleosynthesis and Mixing in the Supernova Remnant Cassiopeia A,” seminar at Centre d’Etudes de Saclay, Service d’Astrophysique (20 January, Saclay, France).
- 2000 “Recent Advances in the S-Z Observations of Clusters of Galaxies,” *Le Thé de la Cosmologie* seminar at Centre d’Etudes de Saclay, Service d’Astrophysique (7 March, Saclay, France).
- 2000 “Nucleosynthesis and Mixing in the Supernova Remnant Cassiopeia A,” seminar at Osservatorio Astrofisico di Arcetri (6 April, Firenze, Italy).
- 2000 “Chandra X-ray Spectroimagery of Supernova Remnants,” invited talk given at the symposium “New Vistas from X-Ray Observatories” during the 33rd COSPAR Scientific Assembly (16–23 July, Warsaw, Poland).
- 2000 “Young Supernova Remnants in the Magellanic Clouds,” invited talk at the 11th Annual October Maryland Astrophysics Conference “Young Supernova Remnants” (16–18 October, Greenbelt, MD).
- 2001 “Chandra Views of the Supernova Remnant/Compact Object Connection,” invited talk at the 197th meeting of the AAS (7–11 January, San Diego, CA) (*Bull. Amer. Astr. Soc.*, **32**, 1560).
- 2001 “Sharper Views of Magellanic Cloud Supernova Remnants,” invited talk at the *Chandra* Science Symposium (16–18 July, St. Paul, MN).
- 2001 “Chandra View of Nucleosynthesis, Pulsars, Cosmic Rays and More!” University of Massachusetts, Astronomy Colloquium (1 November, Amherst, MA)
- 2002 “Instabilities and Cosmic Ray Acceleration in Supernova Remnants,” invited talk at the 4th International Conference on High Energy Density Laboratory Astrophysics (23–25 Feb, Ann Arbor, MI).
- 2002 “A Tale of Two Remnants,” lunchtime seminar at STScI (14 March, Baltimore, MD).
- 2002 “A Tale of Two Remnants: Cassiopeia A and G292.0+1.8,” seminar at the NASA/GSFC Laboratory for High Energy Astrophysics (21 May, Greenbelt, MD).

- 2002 “X-ray Spectral Morphology of Young Supernova Remnants,” invited talk given at the symposium “High Energy Studies of Supernova Remnants and Neutron Stars” during the 34th COSPAR Scientific Assembly (10–12 October, Houston, TX).
- 2003 “Supernova Remnants and the Interstellar Medium,” invited talk given at the 201st meeting of the AAS (5–9 Jan, Seattle, WA) (*Bull. Amer. Astr. Soc.*, **34**, 1270).
- 2003 “Abundances from Supernova Remnants,” invited talk given at the Carnegie Observatories Astrophysics Symposium 4 “Origin and Distribution of the Elements” (16–21 February, Pasadena, CA).
- 2003 “New Insights into Supernova Remnants from Four Years of *Chandra* Observations,” invited talk given at the symposium “Four Years of *Chandra* Observations: A Tribute to Riccardo Giacconi” (16–18 September, Huntsville, AL).
- 2004 “Observing Nucleosynthesis in Type Ia Supernova Remnants,” invited talk given at the symposium “Young Neutron Stars and Supernova Remnants” during the 35th COSPAR Scientific Assembly (18–25 July, Paris, France).
- 2004 “Searching for Galaxy Clusters in the Dark,” Astronomy Seminar, Rutgers University (8 October, Piscataway, NJ).
- 2005 “New Insights into the Physics of Supernovae and their Remnants: A Comprehensive X-ray Study of SN 1572,” McGill University and Université de Montréal, Joint Astrophysics Colloquium (13 September, Montréal, CA).
- 2005 “New Insights into the Physics of Supernovae and their Remnants: A Comprehensive X-ray Study of SN 1572,” Kyoto University, Astrophysics Seminar (18 October, Kyoto, Japan).
- 2006 “Evidence for the Hadronic Component of Cosmic Rays at the Forward Shock of Tycho’s Supernova Remnant,” seminar to the Princeton ISM group (16 January, Princeton, NJ).
- 2006 “Review of X-Ray Observations of Core Collapse SNRs,” invited talk given at the KITP Conference: Supernova and Gamma-Ray Burst Remnants (6 February, Santa Barbara, California).
- 2006 “X-ray Observations of the Tycho Supernova Remnant,” invited talk given at the 208th meeting of the AAS (4–8 June, Calgary, CA).
- 2006 “Constraints on SN Ia from Their Remnants: X-ray Studies of the Tycho SNR”, invited talk at Joint Discussion 9 during the 26th meeting of the International Astronomical Union, (17–18 August, Prague, Czech Republic).
- 2006 “New Insights into the Physics of Supernovae and their Remnants: A Comprehensive X-ray Study of SN 1572,” Harvard University, Astronomy Colloquium, (21 Sept, Cambridge, MA)
- 2006 “Recent and Future Topics Concerning the X-Ray Emission from Supernova Remnants,” invited talk at the conference “Extreme Universe in the *Suzaku* Era” (4–8 December, Kyoto, Japan)
- 2007 “New Insights into the Physics of Supernovae and their Remnants: A Comprehensive X-ray Study of SN 1572,” Princeton University, Astrophysics Colloquium, (6 March, Princeton, NJ)

- 2007 “ACT: The Atacama Cosmology Telescope,” invited talk at the SCS/PIRE Summer School on the Large Scale Structure – CMB connection (23 March, Santiago, Chile)
- 2007 “New Insights into the Physics of Supernovae and their Remnants: A Comprehensive X-ray Study of SN 1572,” Pennsylvania State University, Astrophysics Colloquium, (11 April, State College, PA)
- 2007 “Spectral Inhomogeneities in SNIa Remnants,” invited speaker of the week, (8 May, KITP UC Santa Barbara CA)
- 2008 “Recent X-ray Results on Supernova Remnants,” invited talk at the “The X-ray Universe 2008” symposium, (27–30 May, Granada, Spain)
- 2009 “A Tale of Two Remnants: Cosmic Rays in SN1006 and SN1572,” the Astronomy CSSA-KIPAC-SLAR Seminar, (11 June, Stanford, CA)
- 2009 “First Results from the Atacama Cosmology Telescope: SZ Detections of Galaxy Clusters,” Pontificia Universidad Católica de Chile, Astronomy Colloquium, (20 August, Santiago, Chile)
- 2009 “SZ-Selected Clusters from the New mm-Wave Telescopes: ACT and SPT,” SALT/MeerKAT Science Workshop, (3 November, Cape Town, South Africa)
- 2009 “First Results from the Atacama Cosmology Telescope: SZ Detections of Galaxy Clusters,” HEAD lunch talk at the Harvard-Smithsonian Center for Astrophysics, (2 December, Cambridge, MA)
- 2009 “What’s New from the Atacama Cosmology Telescope?” invited talk at the Rutgers-PUC Astrophysics Workshop 2009, (14-15 December, Santiago, Chile)
- 2009 “First Results from the Atacama Cosmology Telescope: SZ Detections of Galaxy Clusters,” Universidad de Chile, Astronomy Colloquium, (16 December, Santiago, Chile)
- 2010 “Observational Constraints on Cosmic Ray Acceleration in Supernova Remnants,” invited talk at the APS “April” Meeting (13-17 February, Washington, DC)
- 2010 “Recent X-ray Results on Young Supernova Remnants,” invited talk at the workshop “Exploring Supernova Remnants and Pulsar Wind Nebulae in X-rays: before and after ASTRO-H” (18-20 February, ISAS, Sagamihara, Japan)
- 2010 “First Results from the Atacama Cosmology Telescope: SZ Detections of Galaxy Clusters,” Columbia University, Astronomy Colloquium (3 March, New York, NY)
- 2010 “First Results from the Atacama Cosmology Telescope: SZ Detections of Galaxy Clusters,” University of Maryland, Astronomy Colloquium (21 April, College Park, MD)
- 2010 “Clusters and Cosmology from the Atacama Cosmology Telescope,” University of Miami, Physics Colloquium (1 December, Coral Gables, FL)
- 2011 “Clusters and Cosmology from the Atacama Cosmology Telescope,” Pennsylvania State University, Astrophysics Colloquium, (31 August, State College, PA)

Abstracts

- 1982 "An Eigenvalue Approach to the Solution of Nonequilibrium Ionization and Applications to Models of Supernova Remnants," J. P. Hughes, *Bull. Amer. Astr. Soc.*, **14**, 666.
- 1983 "Kepler's Supernova Remnant – Nonequilibrium Ionization Effects," J. P. Hughes, D. J. Helfand, K. S. Long, and R. White, *Bull. Amer. Astr. Soc.*, **14**, 936.
- 1983 "The Number-Diameter Relationship for the Supernova Remnants in the Large Magellanic Cloud," J. P. Hughes and D. J. Helfand, *Bull. Amer. Astr. Soc.*, **15**, 668.
- 1984 "Nonequilibrium Ionization and the Supernova Remnants in the Large Magellanic Cloud," J. P. Hughes and D. J. Helfand, *Bull. Amer. Astr. Soc.*, **15**, 965.
- 1984 "Kepler's Supernova Remnant – Self-Consistent Models for the X-Ray Emission," J. P. Hughes and D. J. Helfand, *Bull. Amer. Astr. Soc.*, **16**, 466.
- 1985 "A Statistical Study of the Supernova Remnants in the Large Magellanic Cloud," J. P. Hughes and D. J. Helfand, *Bull. Amer. Astr. Soc.*, **16**, 927.
- 1985 "X-Ray Studies of the Supernova Remnant N132D," J. P. Hughes, *Bull. Amer. Astr. Soc.*, **17**, 546.
- 1986 "X-Ray Spectra of Supernova Remnants – A Model Independent Approach," J. P. Hughes, *Bull. Amer. Phys. Soc.*, **31**, 851.
- 1986 "High-Resolution X-Ray Spectroscopy of Cas A: A Nonequilibrium Interpretation," T. H. Markert, P. L. Blizzard, C. R. Canizares, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **18**, 704.
- 1987 "The Mass of the Coma Cluster from X-Ray Observations," J. P. Hughes, *Bull. Amer. Astr. Soc.*, **18**, 1015.
- 1987 "The Distribution of Dark Matter in the Coma Cluster," J. P. Hughes, *Bull. Amer. Phys. Soc.*, **32**, 1063.
- 1987 "Morphological Studies of the Supernova Remnant E0102.2-72.2," J. P. Hughes, R. P. Kirshner, and P. F. Winkler, *Bull. Amer. Astr. Soc.*, **19**, 730.
- 1988 "A Second Supernova Remnant in Puppis A ?" P. F. Winkler, R. P. Kirshner, J. P. Hughes, and S. Heathcote, *Bull. Amer. Astr. Soc.*, **20**, 671.
- 1988 "The Gas Content of A665," M. Birkinshaw, K. A. Arnaud, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **20**, 719.
- 1989 "Astronomical Image Processing with Iterative Deconvolution," P. Nisenson, C. Stansley, and J. Hughes, *Bull. Amer. Astr. Soc.*, **21**, 1072.
- 1990 "Velocities of Galaxies in Abell 665," M. Birkinshaw, J. P. Huchra, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **22**, 882.
- 1991 "Abell 2218 and the Hubble Constant," M. Birkinshaw, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **23**, 973.
- 1991 "Elemental Abundances in the Supernova Remnant G292.0+1.8: Evidence for a Massive Progenitor," J. P. Hughes, and K. P. Singh, *Bull. Amer. Astr. Soc.*, **23**, 918.
- 1991 "FeLiX: An X-Ray Telescope to Perform a Medium Resolution All-Sky Survey in the 2–10 keV Band," P. Slane, M. Elvis, G. Fabbiano, J. Hughes, F. Seward, A. Szentgyorgyi, D. Worrall, *Bull. Amer. Astr. Soc.*, **23**, 1452.

- 1991 "X-Ray Imaging Properties of the *AXAF* Outer Mirror," E. Kellogg, R. Brissenden, J. Chappell, G. Chartas, L. Cohen, K. Flanagan, M. Freeman, D. Graessle, M. Jones, J. Hughes, P. McKinnon, D. Nguyen, W. Podgorski, J. Roll, D. Schwartz, P. Slane, H. Tananbaum, L. Van Speybroeck, A. Szentgyorgyi, P. Zhao, M. Zombeck, T. Casey, G. Matthews, M. Waldman, J. Wynn, T. Gordon, M. Magida, P. Reid, J. Bilbro, M. Joy, J. Kolodziejczak, M. Weisskopf, D. Zissa, J. Arenberg, S. Texter, *Bull. Amer. Astr. Soc.*, **23**, 1349.
- 1992 "Ginga Observation of an Oxygen-Rich Supernova Remnant," I. Asaoka, J. P. Hughes, and K. Koyama, abstract in *Frontiers of X-Ray Astronomy*, Proceedings of the 28th Yamada Conference, (Universal Academy Press: Tokyo), eds. Y. Tanaka & K. Koyama, p. 385.
- 1992 "X-Ray Spectroscopy of SNR N132D," U. Hwang, C. R. Canizares, T. H. Markert, and J. P. Hughes, in *Frontiers of X-Ray Astronomy*, Proceedings of the 28th Yamada Conference, (Universal Academy Press: Tokyo), eds. Y. Tanaka & K. Koyama, p. 389.
- 1992 "High Resolution X-Ray Spectroscopy of the Supernova Remnant N132D," U. Hwang, C. R. Canizares, T. H. Markert and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **24**, 790.
- 1992 "ROSAT High Spatial Resolution Observations of Kepler's Supernova Remnant," P. Slane, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **24**, 1196.
- 1993 "Comparative X-ray Studies of the Tycho and Cas A Supernova Remnants," O. Vancura, J. P. Hughes, and P. Gorenstein, *Bull. Amer. Astr. Soc.*, **25**, 785.
- 1993 "Ginga LAC and Einstein SSS X-Ray Spectral Evidence of Abundance Gradients in Galaxy Clusters," R. E. White, III, C. S. R. Day, I. Hatsukade and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **25**, 1374
- 1994 "A New X-Ray-Discovered Cluster of Galaxies Associated with CL0016+16," J. P. Hughes, M. Birkinshaw, and J. P. Huchra, *Bull. Amer. Astr. Soc.*, **26**, 1395.
- 1994 "An X-Ray Study of the Supernova Remnant W44," I. Harrus, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **26**, 1429.
- 1995 "The Distance to CL0016+16 and the Hubble Constant," J. P. Hughes, and M. Birkinshaw, *Bull. Amer. Astr. Soc.*, **27**, 1292.
- 1995 "The Association of Supernova Remnants and Molecular Clouds in the Large Magellanic Cloud," K. R. Banas, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **27**, 1395.
- 1995 "An X-ray Synchrotron Nebula Associated with the Radio Pulsar PSR B1853+01 in the Supernova Remnant W44," I. Harrus, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **27**, 1307.
- 1995 "Predicted X-ray Performance of the *AXAF* High Resolution Mirror during Ground Calibration at the Marshall Space Flight Center," D. Jerius, L. Cohen, R. Edgar, M. Freeman, T. Gaetz, J. Hughes, E. Kellogg, W. Podgorski, D. Schwartz, L. Van Speybroeck, and P. Zhao, *Bull. Amer. Astr. Soc.*, **27**, 1395.
- 1995 "Calibration of *AXAF* Mirrors Using Synchrotron Radiation," D. E. Graessle, J. Fitch, B. Harris, P. Hsieh, D. Nguyen, J. Hughes, D. Schwartz, and R. Blake, *Bull. Amer. Astr. Soc.*, **27**, 1395.

- 1995 “Absolute Calibration of *AXAF* Effective Area,” E. Kellogg, E. Tsiang, D. Schwartz, J. Hughes, T. Gaetz, B. Wargelin, J. Kolodziejczak, F. Scholze, G. Ulm, S. O’Dell, and R. Elsner, *Bull. Amer. Astr. Soc.*, **27**, 1394.
- 1995 “Ground Calibration of *AXAF*: The HRMA X-ray Detection System,” B. J. Wargelin, J. P. Hughes, E. M. Kellogg, T. J. Norton, and D. A. Schwartz, *Bull. Amer. Astr. Soc.*, **27**, 1395.
- 1995 “*AXAF* Calibration at the XRCF,” J. Z. Juda, L. P. David, R. H. Donnelly, C. Jones, B. R. McNamara, H. D. Tananbaum, H. L. Marshall, J. P. Hughes, E. M. Kellogg, B. Wargelin, J. H. Chappell, A. Kenter, R. Kraft, S. S. Murray, M. V. Zombeck, M. W. Bautz, J. A. Nousek, D. Dewey, T. H. Markert, A. C. Brinkman, C. J. Th. Gassing, P. Predehl, R. A. Austin, J. J. Kolodziejczak, M. C. Weisskopf, J. W. Arenberg, R. Carlson, and S. C. Texter, *Bull. Amer. Astr. Soc.*, **27**, 1394.
- 1996 “*Hubble Space Telescope* Observations of Oxygen-rich Supernova Remnants in the Magellanic Clouds,” J. A. Morse, W. P. Blair, J. P. Hughes, R. P. Kirshner, J. C. Raymond, K. S. Long, M. A. Dopita, R. S. Sutherland, P. F. Winkler, *Bull. Amer. Astr. Soc.*, **28**, 947.
- 1996 “The X-ray Expansion of Tycho’s Supernova Remnant,” J. P. Hughes, *Bull. Amer. Astr. Soc.*, **28**, 1334.
- 1996 “Study of the Composite Remnant MSH 11–62,” I. M. Harrus, J. P. Hughes, and P. O. Slane, *Bull. Amer. Astr. Soc.*, **28**, 1334.
- 1997 “Fe Emission in Tycho’s Supernova Remnant,” U. Hwang, J. P. Hughes, R. Petre, and E. V. Gotthelf, poster presented at the Minnesota SNR Workshop “ 10^{51} Ergs: The Evolution of Shell SNRs,” (March 23–26, Minneapolis MN).
- 1997 “Center-filled X-ray Morphology in SNRs,” P. Slane, J. P. Hughes, R. Petre, and J.-H. Rho, poster presented at the Minnesota SNR Workshop “ 10^{51} Ergs: The Evolution of Shell SNRs,” (March 23–26, Minneapolis MN).
- 1997 “Study of the Composite Remnant MSH 11–62,” I. M. Harrus, J. P. Hughes, and P. Slane, poster presented at the Minnesota SNR Workshop “ 10^{51} Ergs: The Evolution of Shell SNRs,” (March 23–26, Minneapolis MN).
- 1997 “Interferometric Images of the Sunyaev-Zel’dovich Effect in Galaxy Clusters from $z = 0.15$ to $z = 0.83$: toward an Independent Determination of H_0 and Omega,” M. Joy, J. Carlstrom, L. Grego, W. Holzapfel, J. P. Hughes, and M. Donahue, talk given at the conference “Clusters of Galaxies at Different Redshifts,” (May 28–31, Ruidoso, NM).
- 1997 “Systematic X-ray Spectroscopy of Supernova Remnants in the Magellanic Clouds,” I. Hayashi, K. Koyama, and J. P. Hughes, poster presented at IAU Symposium No. 188, “The Hot Universe,” (August 26–30, Kyoto, Japan).
- 1997 “*ASCA* Observation of Distant Clusters of Galaxies,” T. Tsuru, H. Tomida, K. Koyama, J. P. Hughes, N. Arimoto, T. Kii, and M. Hattori, poster presented at IAU Symposium No. 188, “The Hot Universe,” (August 26–30, Kyoto, Japan).

- 1997 "ASCA X-ray Spectroscopy of LMC Supernova Remnants and the Metal Abundances of the LMC," I. Hayashi, K. Koyama, and J. P. Hughes, poster presented at IAU Symposium No. 187, "Cosmic Chemical Evolution," (August 26–30, Kyoto, Japan).
- 1997 "Determining the Hubble Constant from the Sunyaev-Zel'dovich Effect of CL 0016+16 and MS 0451.6–0305," J. P. Hughes, J. Carlstrom, M. Joy, L. Grego, and W. Holzapfel, talk given at the High Energy Astrophysics Division meeting of the AAS, (Nov 4–7, Estes Park, CO).
- 1997 "To Be or Not to Be ... Composite: An ASCA Study of the SNR G272.2–3.2," I. Harrus, P. Slane, and J. P. Hughes, poster presented at the High Energy Astrophysics Division meeting of the AAS, (Nov 4–7, Estes Park, CO).
- 1997 "Nonthermal Emission from SNR G347.5–0.5: Another Case of Cosmic Ray Acceleration?" P. Slane, P. Plucinsky, I. M. Harrus, J. P. Hughes, A. J. Green, and B. M. Gaensler, *Bull. Amer. Astr. Soc.*, **29**, 1368.
- 1997 "X-Ray Measurements of the Intercluster Medium and Interferometric Observations of the Sunyaev-Zel'dovich Effect in Abell 2218," S. K. Patel, M. Joy, J. E. Carlstrom, J. P. Hughes, L. Grego, W. L. Holzapfel, and A. R. Cooray, *Bull. Amer. Astr. Soc.*, **29**, 1399.
- 1998 "The Structure of Galaxy Clusters from Deep ROSAT X-ray Images," J. P. Hughes, poster presented at the conference "Highlights in X-ray Astronomy" (June 17–18, Garching, Germany).
- 1998 "SNRs in the LMC," J. P. Hughes, talk given at the First *XMM* Workshop "Science with *XMM*" (Sept 30–Oct 2, ESTEC, Noordwijk, The Netherlands).
- 1998 "New Ejecta-Dominated Young Galactic SNRs," J. P. Hughes, talk presented at the Young Supernova Remnant Workshop (Oct 11–13, Boulder, CO).
- 1998 "X-Ray Observations of LMC SNRs," J. P. Hughes, talk presented at the Young Supernova Remnant Workshop (Oct 11–13, Boulder, CO).
- 1998 "The Shapes of X-ray Galaxy Clusters: Effect on the Hubble Constant from the SZ Effect and the Distribution of Intrinsic Axial Ratios," talk given at the workshop "Cosmological Constraints from X-Ray Clusters" (Dec 9–11, Strasbourg, France).
- 1999 "The Dynamical State of Abell 665 and H_0 ," P. L. Gómez, J. P. Hughes, and M. Birkinshaw, *Bull. Amer. Astr. Soc.*, **31**, 665.
- 1999 "A Hubble Constant Estimate from X-ray Observations and Sunyaev-Zel'dovich Effect Measurements towards Abell 1995," S. K. Patel, M. Joy, J. E. Carlstrom, L. Grego, J. P. Hughes, E. Reese, G. Holder, and J. Mohr, *Bull. Amer. Astr. Soc.*, **31**, 700.
- 1999 "ASCA Spectroscopy of Middle-Aged LMC Supernova Remnants," M. Gagné and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **31**, 703.
- 1999 "Measurements of H_0 in Abell 1995 and Expected Improvements from Upcoming *Chandra* X-ray Observation," S. K. Patel, M. Joy, J. E. Carlstrom, L. Grego, J. P. Hughes, E. Reese, G. Holder, and J. Mohr, *Bull. Amer. Astr. Soc.*, **31**, 887.
- 1999 "Distance Estimates for High Redshifts Clusters from SZ and X-ray Measurements," M. Joy, J. E. Carlstrom, E. D. Reese, G. P. Holder, J. Mohr, S. K. Patel, L. Grego,

- W. L. Holzapfel, M. Donahue, J. P. Hughes, and D. Neumann, *Bull. Amer. Astr. Soc.*, **31**, 916.
- 1999 “A New Ejecta-Dominated Galactic Supernova Remnant,” C. Rakowski, J. P. Hughes, P. Slane, and P. Plucinsky, *Bull. Amer. Astr. Soc.*, **31**, 973.
- 1999 “The X-ray Spectrum of the Supernova Remnant W49B,” U. Hwang, R. Petre, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **31**, 974.
- 1999 “Imaging the Sunyaev-Zel’dovich Effect in the Galaxy Cluster MS1137+66,” M. Joy, S. Patel, J. Carlstrom, G. Holder, E. Reese, L. Grego, W. Holzapfel, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **31**, 1388.
- 1999 “G266.2–1.2: Another Nonthermal Shell-Type SNR,” P. Slane, J. P. Hughes, R. Edgar, and P. P. Plucinsky, *Bull. Amer. Astr. Soc.*, **31**, 1418.
- 1999 “Nucleosynthesis and Mixing in Cassiopeia A,” C. E. Rakowski, J. P. Hughes, D. N. Burrows, and P. O. Slane, *Bull. Amer. Astr. Soc.*, **31**, 1433.
- 1999 “A Mass and H_0 Estimate from Sunyaev-Zel’dovich Effect, X-ray, and Optical Measurements of Galaxy Cluster Abell 1995,” S. K. Patel, M. Joy, J. Carlstrom, G. Holder, E. Reese, P. Gomez, J. Hughes, L. Grego, and W. Holzapfel, *Bull. Amer. Astr. Soc.*, **31**, 1466.
- 2000 “XMM/EPIC Main Properties for Galaxy Cluster Observations,” J. L. Sauvageot, M. Arnaud, E. Belsole, D. Neumann, A. Decourchelle, J. Hughes, P. Ferrando, S. Majerovitch, and C. Rakowski, poster presented at the IAP 2000 International Conference “Constructing the Universe with Clusters of Galaxies” (July 4–8, Paris, France).
- 2000 “Chandra Observations of Supernova Remnants,” D. N. Burrows, R. Chevalier, J. P. Hughes, U. Hwang, K. T. Lewis, R. McCray, E. Michael, R. Petre, C. Rakowski, P. Slane, G. P. Garmire, and S. S. Holt, presented at the X-Ray Astronomy 2000 meeting (Sept 4–8, 2000, Palermo, Italy).
- 2000 “G266.2–1.2: Another Nonthermal Shell-Type SNR,” P. Slane, J. P. Hughes, R. Edgar, P. P. Plucinsky, H. Tsunemi, E. Miyata, and B. Aschenbach, poster presented at the 11th Annual October Maryland Astrophysics Conference “Young Supernova Remnants” (16–18 October, Greenbelt, MD).
- 2000 “Chandra X-ray Observations and Sunyaev-Zel’dovich Effect Measurements of Abell 1995,” S. K. Patel, M. Joy, J. Carlstrom, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **32**, 1198.
- 2000 “The Evolution of Iron-rich Ejecta in the Remnants of Type Ia SNe,” J. P. Hughes, C. E. Rakowski, P. Slane, D. Burrows, and J. Nousek, *Bull. Amer. Astr. Soc.*, **32**, 1236.
- 2000 “Studying the Centrally-Peaked Morphology of G272.2–3.2,” I. M. Harrus, P. O. Slane, R. Smith, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **32**, 1238.
- 2000 “Chandra Observations of the High Mach Number Shock in E0102.2–7219: New Evidence for Cosmic Ray Acceleration,” C. E. Rakowski, J. P. Hughes, and A. Decourchelle, *Bull. Amer. Astr. Soc.*, **32**, 1252.

- 2000 "Exploring the Small Scale Structure of N103B," K. T. Lewis, D. N. Burrows, J. A. Nousek, G. P. Garmire, J. P. Hughes, and P. O. Slane, *Bull. Amer. Astr. Soc.*, **32**, 1540.
- 2000 "Fabry-Perot Spectroscopy and X-ray Imaging of the Balmer-Dominated Supernova Remnant DEM 71," P. Ghavamian, J. P. Hughes, C. E. Rakowski, and T. B. Williams, *Bull. Amer. Astr. Soc.*, **32**, 1540.
- 2000 "Chandra Observations of SNR G292.0+1.8," P. Roming, D. N. Burrows, J. P. Hughes, P. O. Slane, G. P. Garmire, and J. A. Nousek, *Bull. Amer. Astr. Soc.*, **32**, 1540.
- 2000 "3-D General Relativistic MHD Simulations of Generating Jets," K.-I. Nishikawa, S. Koide, K. Shibata, T. Kudoh, H. Sol, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **32**, 1521.
- 2001 "HST-WFPC2 Imaging of the Crab-like Supernova Remnant SNR0540-69.3 in the LMC," J. A. Morse, R. P. Kirshner, W. P. Blair, P. F. Winkler, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **33**, 840.
- 2001 "Chandra Observations of the Galactic Oxygen-Rich Supernova Remnant G292.0 +1.8," S. Park, P. W. A. Roming, D. N. Burrows, G. P. Garmire, J. A. Nousek, J. P. Hughes, and P. O. Slane, *Bull. Amer. Astr. Soc.*, **33**, 1490.
- 2001 "3-D General Relativistic MHD Simulations of Generating Jets," K.-I. Nishikawa, S. Koide, K. Shibata, T. Kudoh, H. Sol, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **33**, 1498.
- 2001 "Software Package for Analysis of Thermal X-Ray Spectra of Supernova Remnants," K. J. Borkowski, K. A. Arnaud, B. Dorman, J. P. Hughes, C. L. Sarazin, and R. A. Smith, *Bull. Amer. Astr. Soc.*, **33**, 1492.
- 2002 "A High-resolution Study of Nonthermal Emission from the SNR G347.3-0.5," J. Lazendic, P. Slane, B. Gaensler, P. Plucinsky, and J. Hughes, poster presented at the High Energy Astrophysics Division (HEAD) mtg. of the American Astronomical Society (20-23 April 2002, Albuquerque, NM) (*Bull. Amer. Phys. Soc.*, #N17.041).
- 2002 "3-D General Relativistic MHD Simulations of Generating Jets," K.-I. Nishikawa, S. Koide, K. Shibata, T. Kudoh, H. Sol, and J. P. Hughes, poster presented at the High Energy Astrophysics Division (HEAD) mtg. of the American Astronomical Society (20-23 April 2002, Albuquerque, NM) (*Bull. Amer. Phys. Soc.*, #B17.093).
- 2002 "Chandra Observations of Kes 73 and its Anomalous X-ray Pulsar," P. Slane, J. P. Hughes, D. N. Burrows, and J. A. Nousek, poster presented at the High Energy Astrophysics Division (HEAD) mtg. of the American Astronomical Society (20-23 April 2002, Albuquerque, NM) (*Bull. Amer. Phys. Soc.*, #S7.005).
- 2002 "X-ray Spectral Variations in the Supernova Remnant N63A," J. S. Warren, J. P. Hughes, P. Slane, D. Burrows, and J. Nousek, *Bull. Amer. Astr. Soc.*, **34**, 665.
- 2002 "Chandra Observation of SNR N49B in the Large Magellanic Cloud," S. Park, D. N. Burrows, G. P. Garmire, J. A. Nousek, J. P. Hughes, and P. O. Slane, *Bull. Amer. Astr. Soc.*, **34**, 665.

- 2002 "SNR N49 in the Large Magellanic Cloud: X-ray Emission from Metal-Rich Ejecta, Shocked ISM, and Neutron Star," D. N. Burrows, S. Park, G. P. Garmire, J. A. Nousek, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **34**, 665.
- 2002 "DEM L71: Shock Physics at High Resolution," C. E. Rakowski, P. Ghavamian, J. P. Hughes, and T. B. Williams, *Bull. Amer. Astr. Soc.*, **34**, 666.
- 2002 "Jet Formation with 3-D General Relativistic MHD Simulations," G. A. Richardson, K.-I. Nishikawa, R. Preece, P. Hardee, S. Koide, K. Shibata, T. Kudoh, H. Sol, J. P. Hughes, and J. Fishman, *Bull. Amer. Astr. Soc.*, **34**, 1123.
- 2002 "The Complex Structure and Kinematics of the Oxygen-Rich SNR G292.0+1.8," P. Ghavamian, J. P. Hughes, and T. B. Williams, *Bull. Amer. Astr. Soc.*, **34**, 1248.
- 2002 "The End of a Mystery? Results from a Combined *XMM-Newton* and *Chandra* analysis of the SNR MSH 11–62," I. M. Harrus, P. O. Slane, B. M. Gaensler, J. P. Hughes, D. A. Moffett, and R. D. Dodson, *Bull. Amer. Astr. Soc.*, **34**, 1324.
- 2003 "Bright X-ray Emission from Supernova Remnant G349.7+0.2 Interacting with a Molecular Cloud," J. S. Lazendic, P. O. Slane, Y. Chen, J. P. Hughes, D. N. Burrows, and J. Nousek, *Bull. Amer. Astr. Soc.*, **35**, 613
- 2003 "The Formation of Relativistic Jets from Kerr Black Holes," K.-I. Nishikawa, G. Richardson, R. Preece, P. Hardee, S. Koide, K. Shibata, T. Kudoh, H. Sol, J. P. Hughes, and J. Fishman, *Bull. Amer. Astr. Soc.*, **35**, 706
- 2003 "The *Chandra* Observation of Supernova Remnant 0103–72.6 in the Small Magellanic Cloud," S. Park, D. N. Burrows, J. A. Nousek, G. P. Garmire, J. P. Hughes, and P. O. Slane, *Bull. Amer. Astr. Soc.*, **35**, 719
- 2003 "Compact Central Object in SNR G347.3–0.5," J. S. Lazendic, P. O. Slane, B. Gaensler, P. Plucinsky, J. P. Hughes, and D. Galloway, poster presented at IAU Symposium 218, "Young Neutron Stars and Their Environments" (14–17 July 2003, Sydney, Australia).
- 2003 "Chandra Observations of 1E 1841–045, the AXp in Kes 73." P. O. Slane, J. P. Hughes, and F. Ozel, poster presented at IAU Symposium 218, "Young Neutron Stars and Their Environments" (14–17 July 2003, Sydney, Australia).
- 2003 "X-Ray Studies of the Central Source in CTA 1," P. O. Slane, E. R. Zimmerman, M. J. Clarke, B. M. Gaensler, and J. P. Hughes, poster presented at IAU Symposium 218, "Young Neutron Stars and Their Environments" (14–17 July 2003, Sydney, Australia).
- 2003 "The Type Ia Supernova Remnant 0509–67.5," J. S. Warren, J. P. Hughes, and P. O. Slane, poster presented at the symposium "Four Years of *Chandra* Observations: A Tribute to Riccardo Giacconi" (16–18 September 2003, Huntsville, AL).
- 2003 "New Galaxy Cluster Surveys," J. P. Hughes, talk at the First Robert Stobie Memorial SALT Workshop (29–31 October 2003, Cape Town, South Africa).
- 2003 "Nucleosynthesis in the Oxygen-Rich Supernova Remnant G292.0+1.8 from *Chandra* X-Ray Spectroscopy," S. Park, J. P. Hughes, P. O. Slane, D. N. Burrows, P. W. A. Roming, J. A. Nousek, and G. P. Garmire, *Bull. Amer. Astr. Soc.*, **35**, 1264

- 2003 “*Chandra* Study of the Pulsar Wind Nebula in the Supernova Remnant MSH 11–62,” J. P. Bernstein, I. M. Harris, P. O. Slane, B. M. Gaensler, J. P. Hughes, D. A. Moffett, and R. D. Dodson, *Bull. Amer. Astr. Soc.*, **35**, 1420
- 2004 “X-Rays from the Most Massive DLS Shear-Selected Galaxy Clusters,” J. P. Hughes, I. Dell’Antonio, J. Hennawi, V. Margoniner, S. Molnar, D. Norman, D. Spergel, J. A. Tyson, G. Wilson, and D. Wittman, talk given at the symposium “Clusters of Galaxies: New Insights from *XMM-Newton*, *Chandra* and INTEGRAL” during the 35th COSPAR Scientific Assembly (18–25 July, Paris, France).
- 2004 “G337.2–0.7: an Asymmetric Type Ia Supernova Remnant?” C. E. Rakowski, C. Badenes, J. P. Hughes, P. Slane, and B. Gaensler, *Bull. Amer. Astr. Soc.*, **36**, 953
- 2004 “A Principle Component Analysis of Four Galactic SNRs,” J. S. Warren and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **36**, 952
- 2004 “The *Chandra* First Year Survey of DLS Shear-Selected Galaxy Clusters,” J. P. Hughes, I. Dell’Antonio, J. Hennawi, V. Margoniner, D. Norman, D. Spergel, J. A. Tyson, G. Wilson, and D. Wittman, *Bull. Amer. Astr. Soc.*, **36**, 904
- 2004 “Evidence of Fe- and Ne- rich ejecta in an aged Galactic supernova remnant VRO 42.05.01,” K. Mori, S. Park, D. N. Burrows, J. P. Hughes, and P. O. Slane, *Bull. Amer. Astr. Soc.*, **36**, 950
- 2004 “Discovery of Low-Luminosity Pulsar Wind Nebula in SNR G63.7+1.1,” S. Park, K. Mori, D. Burrows, J. Hughes, P. Slane, and G. Garmire, *Bull. Amer. Astr. Soc.*, **36**, 1463
- 2004 “*Chandra* Observations of G327.1–1.1: Evidence for a Disrupted PWN,” P. Slane, B. M. Gaensler, E. van der Swaluw, J. P. Hughes, and J. A. Jenkins, *Bull. Amer. Astr. Soc.*, **36**, 1481
- 2004 “A Dual Attack: Pulsar Wind Nebulae Simulations and X-Ray Observations of MSH 11–62,” J. P. Bernstein, P. A. Hughes, I. M. Harris, P. O. Slane, B. M. Gaensler, J. P. Hughes, D. A. Moffett, and R. D. Dodson, *Bull. Amer. Astr. Soc.*, **36**, 1512
- 2004 “Shear-selected Clusters from the Deep Lens Survey,” D. Wittman, I. Dell’Antonio, V. Margoniner, J. A. Tyson, J. P. Hughes, J. Cohen, D. Norman, and the DLS Team, *Bull. Amer. Astr. Soc.*, **36**, 1595
- 2005 “*Chandra* Studies of Tycho’s Supernova Remnant,” J. P. Hughes, talk presented at the X-ray Universe 2005 Conference (26–30 September 2005, San Lorenzo de El Escorial, Spain).
- 2005 “Constraining the Progenitors and Explosions of Supernova Remnants with *Constellation-X*,” U. Hwang, J. P. Hughes, C. Badenes, E. Feigelson, F. Paerels, R. Petre, N. Schulz, M. Shull, P. O. Slane, R. Smith, and S. L. Snowden, *Bull. Amer. Astr. Soc.*, **37**, 1180
- 2005 “Can Ejecta-Dominated Supernova Remnants be Typed from their X-ray Spectra? The Case of G337.2–0.7,” C. E. Rakowski, C. Badenes, B. M. Gaensler, P. O. Slane, J. P. Hughes, and J. Gelfand, *Bull. Amer. Astr. Soc.*, **37**, 1435

- 2005 "First Results from a Principal Component Analysis of Tycho's SNR: Evidence for Cosmic Ray Ion Acceleration," J. S. Warren, J. P. Hughes, and C. Badenes, *Bull. Amer. Astr. Soc.*, **37**, 1437
- 2006 "The X-ray emission of the supernova remnant W49B observed with *XMM-Newton*," M. Miceli, A. Decourchelle, J. Ballet, F. Bocchino, J. P. Hughes, U. Hwang, and R. Petre, 36th COSPAR Scientific Assembly, 36, 1616
- 2006 "Learning about the Spider from its Web: Studying the Neutron Star and Supernova Remnant in G328.4+0.2," J. Gelfand, B. Gaensler, P. Slane, D. Patnaude, J. P. Hughes, and F. Camilo, 36th COSPAR Scientific Assembly, 36, 3158
- 2006 "Suzaku Observations of The North Polar Spur: A Window to C and N Emission," E. D. Miller, H. Tsunemi, M. W. Bautz, R. Fujimoto, J. P. Hughes, S. Katsuda, M. Kokubun, D. McCammon, K. Mitsuda, F. S. Porter, Y. Takei, Y. Tsuboi, N. Yamasaki, and the *Suzaku* Team, *Bull. Amer. Astr. Soc.*, **38**, 111
- 2006 "X-ray Observations of the Tycho Supernova Remnant," J. P. Hughes, *Bull. Amer. Astr. Soc.*, **38**, 139
- 2006 "The North Polar Spur: Detection of Highly-Ionized Nitrogen Emission with *Suzaku*," E. D. Miller, H. Tsunemi, M. W. Bautz, R. Fujimoto, J. P. Hughes, S. Katsuda, M. Kokubun, D. McCammon, K. Mitsuda, F. S. Porter, Y. Takei, Y. Tsuboi, N. Yamasaki, and the *Suzaku* Team, *Bull. Amer. Astr. Soc.*, **38**, 329
- 2006 "Chandra Observation of Galactic SNR G299.2–2.9," S. Park, P. O. Slane, J. P. Hughes, K. Mori, D. N. Burrows, and G. P. Garmire, *Bull. Amer. Astr. Soc.*, **38**, 329
- 2006 "Chandra Observations of the Kepler Supernova Remnant," J. P. Hughes, and J. S. Warren, *Bull. Amer. Astr. Soc.*, **38**, 330
- 2006 "Now You See It: Radio Identification of Galactic X-ray and Gamma-ray Sources," B. M. Gaensler, P. O. Slane, J. D. Gelfand, G. E. Anderson, A. J. Green, C. L. Brogan, F. Camilo, F. Crawford, J. P. Hughes, J. L. Lazendic, J. W. Lazio, N. E. Kassim, N. M. McClure-Griffiths, and S. K. Patel, *Bull. Amer. Astr. Soc.*, **38**, 347
- 2006 "Jets and Ejecta from Afar: A Deep Chandra Observation of Kes 75," P. O. Slane, B. M. Gaensler, T. D. Morton, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **38**, 348
- 2006 "Suzaku Observations of Abell 1795," M. W. Bautz, K. Arnaud, Y. Fukazawa, K. Hayashida, P. Henry, J. P. Hughes, K. Kawaharada, K. Makishima, E. Miller, S. Porter, J. Sanders, M. Sato, and T. Tamura, *Bull. Amer. Astr. Soc.*, **38**, 371
- 2006 "Chandra ACIS Survey of M33 (ChASeM33): A Deep X-ray Survey of the Nearest Face-on Spiral," P. P. Plucinsky, M. Sasaki, T. J. Gaetz, B. Williams, K. S. Long, R. P. Kirshner, W. Pietsch, F. Haberl, D. J. Helfand, J. P. Hughes, P. F. Winkler, W. P. Blair, P. Ghavamian, R. J. Edgar, T. G. Pannuti, T. Mazeh, A. Shporer, D. Breitschwerdt, L. Bianchi, M. A. de Avillez, D. Thilker, R. K. Smith, J. E. Grindlay, K. Kuntz, and R. Tuellmann, *Bull. Amer. Astr. Soc.*, **38**, 1021
- 2006 "Chandra ACIS Survey of M33 (ChASeM33): Supernova Remnants," K. S. Long, P. F. Winkler, W. P. Blair, P. Ghavamian, J. P. Hughes, T. J. Gaetz, D. J. Helfand, R. P. Kirshner, T. G. Pannuti, P. P. Plucinsky, M. Sasaki, and the ChASeM33 team, *Bull. Amer. Astr. Soc.*, **38**, 1022

- 2006 “*Chandra* ACIS Survey of M33 (ChASeM33): X-ray Imaging and Spectroscopy of M33SNR21, the Brightest X-ray Supernova Remnant in M33,” T. J. Gaetz, J. P. Hughes, W. P. Blair, P. F. Winkler, P. Ghavamian, K. S. Long, T. G. Pannuti, B. Williams, R. J. Edgar, P. P. Plucinsky, M. Sasaki, R. P. Kirshner, M. Avillez, D. Breitschwerdt, and the ChASeM33 team, *Bull. Amer. Astr. Soc.*, **38**, 1022
- 2006 “A Deep *Chandra* Observation of Kepler’s Supernova Remnant: A Type Ia Supernova with Circumstellar Interaction,” S. P. Reynolds, K. J. Borkowski, C. Badenes, J. P. Hughes, U. Hwang, J. M. Laming, and J. M. Blondin, *Bull. Amer. Astr. Soc.*, **38**, 1115
- 2006 “A Deep *Chandra* Observation of the O-Rich SNR 0540–69.3 in the LMC,” S. Park, J. Hughes, P. Slane, D. Burrows, and K. Mori, *Bull. Amer. Astr. Soc.*, **38**, 1115
- 2007 “Spatial And Spectral Properties of X-ray Synchrotron Emission in Kepler’s Supernova Remnant,” S. P. Reynolds, K. J. Borkowski, J. M. Blondin, C. Badenes, J. P. Hughes, U. Hwang, and J. M. Laming, *Bull. Amer. Astr. Soc.*, **38**, 114
- 2007 “Observations of X-rays and Thermal Dust Emission from the Supernova Remnant Kes 75,” P. O. Slane, T. D. Morton, K. J. Borkowski, S. P. Reynolds, D. J. Helfand, B. M. Gaensler, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **38**, 115
- 2007 “Ultra-Deep *Chandra* Observation of Galactic Oxygen-Rich Supernova Remnant G292.0+1.8: The First Images,” S. Park, D. N. Burrows, J. P. Hughes, P. O. Slane, B. M. Gaensler, and P. Ghavamian, *Bull. Amer. Astr. Soc.*, **38**, 159
- 2007 “Sunyaev-Zel’dovich Predictions for the Atacama Cosmology Telescope,” F. Menanteau, J. P. Hughes, R. Jimenez, W. Barkhouse, Z. Berta, S. Hansen, C. Hernández-Monteagudo, A. Kosowsky, Y.-T. Lin, K. Moodley, C. Ngeow, N. Roche, D. Spergel, D. Tucker, and L. Verde, *Bull. Amer. Astr. Soc.*, **38**, 184
- 2007 “*Chandra* Observations of the Composite Supernova Remnant G327.1–1.1,” T. Temim, P. Slane, B. Gaensler, J. P. Hughes, and E. van der Swaluw, American Astronomical Society Meeting Abstracts, 211, #100.20
- 2007 “A *Suzaku* Observation of the Cluster of Galaxies A1060,” K. Sato, N. Y. Yamasaki, M. Ishida, Y. Ishisaki, T. Ohashi, T. Kitaguchi, M. Kawaharada, M. Kokubun, K. Makishima, N. Ota, K. Nakazawa, T. Tamura, K. Matsushita, N. Kawano, Y. Fukazawa, and J. P. Hughes, presented at the ESO Astrophysics Symposia, *Heating versus Cooling in Galaxies and Clusters of Galaxies* (Heidelberg, Germany).
- 2007 “*Suzaku* Observations of A2218,” Y. Takei, T. Ohashi, J. P. Henry, K. Mitsuda, R. Fujimoto, T. Tamura, N. Y. Yamasaki, K. Hayashida, N. Tawa, K. Matsushita, M. W. Bautz, J. P. Hughes, G. M. Madejski, R. L. Kelley, and K. A. Arnaud, presented at the ESO Astrophysics Symposia, *Heating versus Cooling in Galaxies and Clusters of Galaxies* (Heidelberg, Germany).
- 2008 “Azimuthal Variation in the Properties of Cosmic Ray Acceleration at the Blast Wave of SN 1006,” J. P. Hughes, E. Reynoso, C. Badenes, D. Moffett, and G. Cassam-Chenai, 37th COSPAR Scientific Assembly, 37, 1295

- 2008 “*Chandra* and *XMM* Observations of the Composite Supernova Remnant G327.1 –1.1,” T. Temim, P. Slane, B. Gaensler, J. P. Hughes, and E. van der Swaluw, 37th COSPAR Scientific Assembly, 37, 3166
- 2008 “An Overview of and Recent Results from the *Chandra* ACIS Survey of M33 (ChASeM33),” P. P. Plucinsky, B. Williams, K. Long, T. Gaetz, R. Tuellmann, M. Sasaki, W. Pietsch, K. Kuntz, J. P. Hughes, W. P. Blair, and the ChASeM33 Team, AAS/High Energy Astrophysics Division, 10, #29.01
- 2008 “The *Chandra* ACIS Survey of M33 (ChASeM33): The Hot Ionized Medium in NGC604 and IC131,” R. Tuellmann, T. J. Gaetz, P. P. Plucinsky, K. S. Long, J. P. Hughes, W. P. Blair, P. Ghavamian, T. G. Pannuti, and D. Breitschwerdt, AAS/High Energy Astrophysics Division, 10, #29.02
- 2008 “*Chandra* ACIS Survey of M33 (ChASeM33): Supernova Remnants,” T. J. Gaetz, K. S. Long, W. P. Blair, P. Ghavamian, J. P. Hughes, P. F. Winkler, D. J. Helfand, R. P. Kirshner, T. Pannuti, P. P. Plucinsky, R. Tuellmann, and the ChASeM33 Team, AAS/High Energy Astrophysics Division, 10, #29.03
- 2008 “O-rich SNR G292.0+1.8 : Evidence for Shock Expansion within Massive Stellar Wind,” J.-J. Lee, S. Park, J. P. Hughes, P. O. Slane, D. N. Burrows, B. Gaensler, and P. Ghavamian, AAS/High Energy Astrophysics Division, 10, #31.02
- 2008 “Deep *Chandra* Observations of the Pulsar Wind Nebula in Kes 75.” C. Yung Ng, P. O. Slane, B. M. Gaensler, and J. P. Hughes, AAS/High Energy Astrophysics Division, 10, #31.07
- 2009 “Nonthermal X-Rays from Supernova Remnant G330.2+1.0 and the Characteristics of its Central Compact Object,” S. Park, O. Kargaltsev, G. Pavlov, K. Mori, P. O. Slane, J. P. Hughes, D. N. Burrows, and G. P. Garmire, *Bull. Amer. Astr. Soc.*, **41**, 503
- 2009 “*Chandra* ACIS Survey of M33 (ChASeM33): Analysis and Classification of Sources in the ChASeM33 Catalog,” P. P. Plucinsky, R. Tuellmann, T. J. Gaetz, K. Kuntz, K. Long, B. Williams, W. P. Blair, P. Challis, R. Edgar, P. Ghavamian, F. Haberl, D. Helfand, J. P. Hughes, R. Kirshner, T. Mazeh, T. Pannuti, W. Pietsch, A. Shporer, R. Smith, P. F. Winkler, and the ChASeM33 Team, *Bull. Amer. Astr. Soc.*, **41**, 229
- 2009 “Supernova Remnants in the ChASeM33 X-ray Observations of M33,” K. S. Long, W. P. Blair, T. J. Gaetz, D. J. Helfand, J. P. Hughes, T. J. Pannuti, P. P. Plucinsky, R. Tuellmann, B. Williams, P. F. Winkler, and the ChASeM33 Team, *Bull. Amer. Astr. Soc.*, **41**, 229
- 2009 “*Chandra* ACIS Survey of M33 (ChASeM33): A Deep X-ray Survey of the Nearest Face-on Spiral Galaxy,” T. J. Gaetz, R. Tuellmann, P. P. Plucinsky, K. Kuntz, K. S. Long, B. Williams, W. P. Blair, R. J. Edgar, P. Ghavamian, F. Haberl, D. Helfand, J. P. Hughes, R. Kirshner, T. Mazeh, T. Pannuti, W. Pietsch, A. Shporer, R. K. Smith, P. F. Winkler, and the ChASeM33 Team, *Bull. Amer. Astr. Soc.*, **41**, 230
- 2009 “Massive Optically-selected Clusters in the ACT Strip,” F. Menanteau, J. P. Hughes, F. Barrientos, C. Hernández-Monteagudo, L. Infante, R. Jimenez, A. Kosowsky, K. Moodley, and L. Verde, *Bull. Amer. Astr. Soc.*, **41**, 336

- 2009 “X-ray Clusters in the ACT Strip,” J. P. Hughes, F. Menanteau, N. Sehgal, L. Infante, and F. Barrientos, *Bull. Amer. Astr. Soc.*, **41**, 336
- 2009 “Supernovae and Supernova Remnants in the Era of the International X-ray Observatory,” J. P. Hughes, C. Badenes, D. Burrows, J. M. Laming, S. Park, D. Patnaude, P. Slane, A. M. Soderberg, and the Con-X SNR panel, *Bull. Amer. Astr. Soc.*, **41**, 353
- 2009 “*Chandra* Observation of the SNR 0104–72.3 in the SMC,” J.-J. Lee, S. Park, D. N. Burrows, J. P. Hughes, P. O. Slane, K. Mori, and B. Koo, *Bull. Amer. Astr. Soc.*, **41**, 695
- 2009 “*Chandra* Observation of the Galactic SNR G272.2–3.2,” S. Park, J. Lee, J. P. Hughes, P. O. Slane, D. N. Burrows, K. Mori, and G. P. Garmire, *Bull. Amer. Astr. Soc.*, **41**, 695
- 2009 “A Half-Megasecond *Chandra* Observation of the Oxygen-rich Supernova Remnant G292.0+1.8,” J.-J. Lee, S. Park, J. P. Hughes, P. Slane, B. Gaensler, P. Ghavamian, and D. Burrows, *Chandra’s First Decade of Discovery*, Proceedings of the conference held 22–25 September, 2009 in Boston, MA. Edited by Scott Wolk, Antonella Fruscione, and Douglas Swartz, abstract #21
- 2009 “The *Chandra* ACIS Survey of M33 (ChASEM33): A *Chandra* Legacy Program,” R. Tuellmann, T. J. Gaetz, P. P. Plucinsky, K. S. Long, W. P. Blair, P. F. Winkler, B. Williams, K. Kuntz, D. Helfand, J. P. Hughes, and the ChASEM33 Team, *Chandra’s First Decade of Discovery*, Proceedings of the conference held 22–25 September, 2009 in Boston, MA. Edited by Scott Wolk, Antonella Fruscione, and Douglas Swartz, abstract #32
- 2009 “Probing Abell 1795 to the Virial Radius with *Suzaku*,” E. D. Miller, M. W. Bautz, J. Sanders, K. Arnaud, R. Mushotzky, F. S. Porter, K. Hayashida, P. Henry, J. P. Hughes, M. Kawaharada, K. Makashima, M. Sato, T. Tamura, and the *Suzaku* Team, American Astronomical Society Meeting Abstracts, 213, #608.17
- 2010 “The Complex Non-thermal Emission Geometry of Tycho’s SNR in a Deep *Chandra* Observation,” K. A. Eriksen, J. P. Hughes, C. Badenes, G. Cassam-Chenaï, R. Fesen, P. Ghavamian, C. F. McKee, D. Moffett, P. Plucinsky, C. E. Rakowski, E. M. Reynoso, and P. Slane, *Bull. Amer. Astr. Soc.*, **41**, 686
- 2010 “Finding the Needle in G18.95–1.1,” R. Tuellmann, P. Plucinsky, T. Gaetz, P. Slane, I. Harrus, and J. P. Hughes, *Bull. Amer. Astr. Soc.*, **41**, 687
- 2010 “The *Suzaku* Key Project of the Kepler Supernova Remnant: A Status Report,” S. Park, C. Badenes, J. P. Hughes, P. O. Slane, D. N. Burrows, and K. Mori, *Bull. Amer. Astr. Soc.*, **41**, 688
- 2010 “*Chandra* Observation of Galactic SNR G340.6+0.3,” S. Park, J. Lee, J. P. Hughes, P. O. Slane, K. Mori, D. Burrows, and G. P. Garmire, *Bull. Amer. Astr. Soc.*, **42**, 470
- 2010 “The Atacama Cosmology Telescope: SZ Cluster Identification and Follow-up,” J. P. Hughes, F. Menanteau, T. A. Marriage, F. Barrientos, L. Infante, J. Juin, M. Hilton, and the Atacama Cosmology Telescope Team, *Bull. Amer. Astr. Soc.*, **42**, 599

- 2010 “A Deep *Chandra* Observation of SNR N49 in the LMC,” S. Park, J. P. Hughes, D. N. Burrows, P. O. Slane, J. Lee, and K. Mori, *Bull. Amer. Astr. Soc.*, **41**, 842
- 2011 “The Young, Galactic Supernova Remnant G350.1-0.3 and Its Neutron Star: A Study with *Chandra*,” I. Lovchinsky, P. Slane, B. M. Gaensler, J. P. Hughes, C. Ng, J. S. Lazendic, J. Gelfand, and C. Brogan, *Bull. Amer. Astr. Soc.*, **43**, 2011
- 2011 “X-ray Follow-up of ACT SZE clusters,” J. Hughes, talk presented at the SZ2011 Conference, *A New Era for SZ Science* (27–30 June 2011, Santander, Spain).