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## CURRICULUM VITAE

### ALBERTO D. BOLATTO, Ph.D.

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- Education**
- Ph.D. in Astronomy, Boston University, Boston 1996-2000. Dissertation title: The Interstellar Medium in Low Metallicity Environments (advisor: James M. Jackson).
  - M.A. in Astronomy, Boston University, Boston 1993-1996.
  - Licenciado en Astronomía, Universidad de la República, Montevideo (Uruguay), 1987-1993 (advisors: Emilio E. Falco and Julio A. Fernández).
  - Electrical Engineering, Universidad de la República, Montevideo (Uruguay), 1986-1993 (advisor: Juan P. Oliver).

- Employment**
- *Assistant Professor*, University of Maryland, College Park, Department of Astronomy, 2007–present. I pursue several lines of extragalactic research in the nearby and high-redshift universe, including studies of molecular gas and star formation in galaxies, galaxy kinematics and dark matter, molecular cloud structure, radio searches for atomic and molecular transitions at high redshift, and S<sup>3</sup>MC/S<sup>4</sup>MC, a Spitzer Space Telescope Cycle-1/Cycle-3 project for imaging and spectroscopy of the Small Magellanic Cloud in the mid- and far-infrared (<http://celestial.berkeley.edu/spitzer>).
  - *Associate Research Astronomer*, University of California at Berkeley, Department of Astronomy, 2006–2007.
  - *Assistant Research Astronomer* University of California at Berkeley, Department of Astronomy, 2002–2006.
  - *Postdoctoral Scholar*, University of California at Berkeley, Radio Astronomy Laboratory, 2000–2002. Supervisors: Leo Blitz and Richard Plambeck.
  - *Research Assistant*, Boston University Department of Astronomy, 1995–2000.
  - *Presidential University Teaching Fellow*, Boston University, 1994-1995. Taught the discussion sessions for the AS 117 Bioastronomy and AS 109 Cosmology courses.
  - *Presidential University Graduate Fellow*, Boston University, 1993-1994.
  - *Assistant degrees 1 and 2*, Universidad de la República, Instituto de Física de la Facultad de Ciencias, 1989-1993. Research in cometary dynamics and gravitational lensing topics.

- Experience**
- *Observational Astronomy*  
My interests require that I frequently observe at wavelengths from the optical to the cm radio, in imaging and spectroscopy. In order of increasing wavelength, I have been principal investigator in successful proposals using WIYN, Lick, Keck, Lowell, the NTT, the Spitzer Space Telescope, the JCMT, AST/RO, the FCRAO, the KP12m, SEST, CARMA, OVRO, BIMA, the Plateau de Bure Interferometer, the VLA, Arecibo, and the GBT.
  - *Teaching and Mentoring*  
I taught the courses on Spherical Astronomy and Observational Techniques at Montevideo, and the discussion sessions on AS117 Bioastronomy and AS109 Cosmology at Boston University. I have guided the research and collaborated with several undergraduate and graduate students. Among them, I mentored Josh Simon (currently a Millikan Fellow at Caltech, and a 2008 Carnegie Fellow) and Adam Leroy (now a postdoctoral scholar at the Max-Planck Institute

for Astronomy at Heidelberg) during their PhD theses at UCB. I currently co-advise Karin Sandstrom's PhD thesis at UCB, where she works on the S<sup>3</sup>MC project.

- *Astronomical Instrumentation: BIMA/CARMA*

I worked at the Radio Astronomy Laboratory at UCB with Richard Plambeck, pursuing several developments for the Combined Array for Research in Millimeter-wave Astronomy (CARMA). CARMA is the merger of the OVRO and BIMA arrays at a new 2200 m-high site in the southern California Inyo Mountains. My pursuits included the development of the new 1mm dual-polarization receivers, water vapor radiometry for mm-wave adaptive-optics, and upgrades of many subsystems in the 6m antennas and the entire array.

- *Astronomical Instrumentation: AST/RO*

As part of my thesis I helped construct and deploy the Antarctic Submillimeter Telescope and Remote Observatory project (AST/RO), working as one of its four graduate students from 1994 to 2000 (P.I.: Antony A. Stark, Smithsonian Astrophysical Observatory). AST/RO was located at the Amundsen-Scott South Pole Base on the Antarctic plateau, with receivers in the 200 GHz to 1.2 THz frequency range.

- *Astronomical Instrumentation: SPIFI*

I helped construct the South Pole Imaging Fabry-Perot Interferometer (SPIFI), working as one of its two graduate students from 1994 to 2000 (P.I.: Gordon Stacey, Cornell University). SPIFI is a submillimeter (200 – 350  $\mu\text{m}$ ) direct-detection spectrometer using a monolithic silicon bolometer array cooled to  $\sim 60$  mK by an adiabatic demagnetization refrigerator. The spectroscopic capabilities are provided by a tandem of free-standing nickel mesh Fabry-Perot etalons, operating at 77 and 4 K and scanning under computer control.

- *Astrophysical Modeling and Theory*

Chemical and physical modelling of molecular clouds, to understand how different observational probes relate to the underlying structure of the molecular ISM (e.g., ApJ 513, 275). Gravitational microlensing optical modelling of binary compact objects, studying the possibility of using large microlensing surveys to detect Jupiter-size planets around lensing stars (ApJ 436, 112). Modeling of orbital dynamics of comets including planetary and nongravitational perturbations, to quantify the importance of nongravitational forces on secular orbital evolution (P&SS 43, 709).

## Grants

- *A Population of Dusty B Stars in the SMC: The First Extragalactic Debris Disks?*  
Co-I., Spitzer Space Telescope (33 hr.s)
- *Leo T: Probing Star Formation and Dust in the Most Metal-Poor Galaxy Known*  
Co-I., Spitzer Space Telescope (9 hrs.)
- *Key Insights on Nearby Galaxies: a Far-Infrared Survey with Herschel (KINGFISH)*  
Co-I., Herschel Space Observatory (537 hrs.)
- *HERschel Inventory of The Agents of Galaxy Evolution (HERITAGE)*  
Co-I., Herschel Space Observatory (238 hrs.)
- *Dust and Molecules in IZw18*  
P.I., Spitzer Space Telescope (8 hrs.)
- *Dust and Molecules in IZw18*  
P.I., Spitzer Space Telescope (8 hrs.)
- *SAGE-SMC: Surveying the Agents of Galaxy Evolution in the Tidally Disrupted, Low-Metallicity Small Magellanic Cloud*  
Co-I., Spitzer Space Telescope (285 hrs.)
- *RIPL: A Radio Interferometric Planet search*  
Co-I., NASA Origins Program
- *A Complete Picture of the Dust in the Small Magellanic Cloud: Following up Spitzer Imaging with Spectroscopic Observations*

*P.I., Spitzer Space Telescope (106 hrs.)*

- *An In-Depth Analysis of a Prototypical Giant HII Region: NGC 604*

*Co-I., Hubble Space Telescope*

- *The Small Magellanic Cloud: A Template for the Primitive Interstellar Medium*

*P.I., Spitzer Space Telescope (49 hrs.)*

**Awards**

- *National Science Foundation Antarctica Service Medal (2000)*
- *Boston University Presidential Fellow (1993–1995)*

**Memberships**

- *UC Berkeley representative to the CARMA Time Allocation Committee (2006–present)*
- *UC Berkeley representative to the CARMA Science Steering Committee (2006–2007)*
- *International Union of Radio Science, Commission J member (2005–present)*
- *University of California Blanket Exceptional PI status (2004–2007)*
- *International Astronomical Union Member (2003–present)*
- *Earth & Sky Radio Show Honorary Science Advisor (1999–present)*
- *American Astronomical Society Full Member (1996–present)*

**Organizer**

- *Ringberg workshop on Dwarf Galaxies as Astrophysical and Cosmological Probes (Main Organizer together with F. Walter, Germany, March 2006)*

<http://celestial.berkeley.edu/dgacp>

- *IAU XIIth Latin American Regional Meeting (SOC member, Venezuela, 2007)*

## Publications *in Refereed Journals*

- 41) Curran, S. J., Darling, J., **Bolatto**, A. D., Whiting, M. T., Bignell, C., & Webb, J. K. 2007, “HI and OH Absorption in the Lensing Galaxy of MG J0414+0534”, *Monthly Notices of the Royal Astronomical Society*, in press (arXiv0708.1636).
- 40) Carilli, C. L., et al. 2007, “Detection of  $1.6 \times 10^{10} M_{\odot}$  of Molecular Gas in the Host Galaxy of the  $z = 5.77$  SDSS Quasar J0927+2001”, *Astrophysical Journal Letters*, 666, L9.
- 39) Woody, D. P., et al. 2007, “Controller-Area-Network Bus Control and Monitor System for a Radio Astronomy Interferometer”, *Review of Scientific Instruments*, 78, 1.
- 38) Sandstrom, K. M., Peek, J. E. G., Bower, G. C., **Bolatto**, A. D., & Plambeck, R. L. 2007, “A Parallax Distance of  $389_{-21}^{+24}$  parsecs to the Orion Nebula Cluster from Very Long Baseline Array Observations”, *Astrophysical Journal*, 667, 1161 (arXiv0706.2361).
- 37) Bailin, J., Simon, J. D., **Bolatto**, A. D., Gibson, B. K., & Power, C. 2007 “Self-Consistent Massive Disks in Triaxial Dark Matter Halos”, *Astrophysical Journal*, in press (arXiv0706.1357).
- 36) Simon, J. D., **Bolatto**, A. D., et al., 2007 “The *Spitzer* Survey of the Small Magellanic Cloud: Discovery of Embedded Protostars in the HII Region NGC 346”, *Astrophysical Journal*, in press (arXiv0708.1636).
- 35) Knudsen, K. K., Walter, F., Weiss, A., **Bolatto**, A. D., Riechers, D. A., & Menten, K., 2007 “New Insights on the Dense Molecular Gas in NGC 253 as traced by HCN and HCO<sup>+</sup>”, *Astrophysical Journal*, 666, 156.
- 34) Bower, G. C., Saul, D., Bloom, J. S., **Bolatto**, A. D., Filippenko, A. V., Foley, R. J., & Perley, D., 2007 “SubmilliJansky Flashes in Archival Radio Observations”, *Astrophysical Journal*, 666, 346.
- 33) Leroy, A., Cannon, J., Walter, F., **Bolatto**, A. D., & Weiss, A., 2007 “The Low CO Content of the Extremely Metal Poor Galaxy I Zw 18”, *Astrophysical Journal*, in press (arXiv0704.0862).
- 32) Leroy, A., **Bolatto**, A. D., Stanimirović, S., Mizuno, N., Israel, F. P., & Bot, C., 2006 “The *Spitzer* Survey of the Small Magellanic Cloud: Far-Infrared Emission and Cold Gas in the SMC”, *Astrophysical Journal*, 658, 1027.
- 31) **Bolatto**, A. D., et al., 2006 “The *Spitzer* Survey of the Small Magellanic Cloud: S<sup>3</sup>MC Imaging and Photometry in the Mid- and Far-Infrared Wavebands”, *Astrophysical Journal*, 655, 212.
- 30) Leroy, A., **Bolatto**, A. D., Walter, F., & Blitz, L. 2005, “Molecular Gas in the Local Group Dwarf Irregular IC 10”, *Astrophysical Journal*, 643, 825.
- 29) Stanimirović, S., **Bolatto**, A. D., Sandstrom, K., Leroy, A., Simon, J. D., Gaensler, B. M., Shah, R. Y., & Jackson, J. M. 2005, “Spitzer Space Telescope Detection of the Young Supernova Remnant 1E 0102.2-7219”, *Astrophysical Journal Letters*, 632, L103.
- 28) **Bolatto**, A. D., Israel, F. P., & Martin, C. L. 2005, “High Excitation Molecular Gas in the Magellanic Clouds”, *Astrophysical Journal*, 633, 210.
- 27) Leroy, A., **Bolatto**, A. D., Simon, J. D., & Blitz, L. 2005 “The Molecular ISM of Dwarf Galaxies on Kiloparsec Scales: a New Survey for CO in Northern, IRAS-selected Dwarf Galaxies”, *Astrophysical Journal*, 625, 763.
- 26) Bradford, C. M., Stacey, G. J., Nikola, T., **Bolatto**, A. D., Jackson, J. M., Savage, M. L., Davidson, J. A. 2005, “High-Resolution Imaging of CO  $J = 7 \rightarrow 6$  in the Central 2 pc of the Galaxy: Dynamical Heating of the Circumnuclear Disk”, *Astrophysical Journal*, 623, 866.
- 25) Simon, J. D., **Bolatto**, A. D., Leroy, A., & Blitz, L. 2005, “High-Resolution Measurements of the Dark Matter Halos of Four Low Mass Galaxies: Deviations from a Universal Density Profile”, *Astrophysical Journal*, 621, 757.

- 24) Darling, J., Giovanelli, R., Haynes, M., **Bolatto**, A. D., & Bower, G. C. 2004, “Detection of 21 cm Absorption at  $z = 0.78$  in a Survey of Radio Continuum Sources”, *Astrophysical Journal Letters*, 613, L101.
- 23) Curran, S. J., Murphy, M. T., Pihlström, Y. M., **Bolatto**, A. D., Bower, G. C., & Webb, J. K. 2004, “Molecular Fraction Limits in Damped Lyman  $\alpha$  Absorption Systems”, *Monthly Notices of the Royal Astronomical Society*, 352, 536.
- 22) **Bolatto**, A. D., di Francesco, J., & Willott, C. J. 2004, “The Faintness of the 158  $\mu\text{m}$  [C II] Transition in the  $z=6.42$  Quasar SDSS J1148+5251”, *Astrophysical Journal Letters*, 606, L101.
- 21) Bower, G. C., Plambeck, R. L., **Bolatto**, A. D., McCrady, N., Graham, J. R., de Pater, I., & Liu, M. C., 2003, “A Giant Outburst at Millimeter Wavelengths in the Orion Nebula”, *Astrophysical Journal*, 598, 1140.
- 20) Simon, J. D., **Bolatto**, A. D., Leroy, A., & Blitz, L. 2003, “High-Resolution Measurements of the Dark Matter Halo of NGC 2976: Evidence for a Shallow Density Profile”, *Astrophysical Journal*, 596, 957.
- 19) **Bolatto**, A. D., Leroy, A., Israel, F. P., & Jackson, J. M. 2003, “Unusual CO Line Ratios and Kinematics in the N83/N84 Region of the Small Magellanic Cloud”, *Astrophysical Journal*, 595, 167.
- 18) Bradford, C. M., Nikola, T., Stacey, G. J., **Bolatto**, A. D., Jackson, J. M., Savage, M. L., Davidson, J. A., & Higdon, S. J. 2003, “CO ( $J = 7 \rightarrow 6$ ) Observations of NGC 253: Cosmic Ray Heated Warm Molecular Gas”, *Astrophysical Journal*, 586, 891.
- 17) Bradford, C.M., Nikola, T., Stacey, G., Swain, M., **Bolatto**, A.D., Jackson, J.M., Davidson, J., Savage, M., & Ade, P. 2002, “SPIFI: a Direct-Detection Spectrometer for Submillimeter Wavelengths”, *Applied Optics*, 41, 2561.
- 16) **Bolatto**, A. D., Simon, J. D., Leroy, A., & Blitz, L. 2002, “The Density Profile of the Dark Matter Halo of NGC 4605”, *Astrophysical Journal*, 565, 238.
- 15) Stark, A.A., et al. 2001, “The Antarctic Submillimeter Telescope and Remote Observatory (AST/RO)”, *Publications of the Astronomical Society of the Pacific*, 113, 567.
- 14) Zhang, X., Lee, Y., **Bolatto**, A.D., & Stark, A.A. 2001, “CO ( $4 \rightarrow 3$ ) and [C I] Observations of the Carina Molecular Cloud Complex”, *Astrophysical Journal*, 553, 274.
- 13) Ojha, R., Stark, A.A., Hsieh, H., Lane, A., Chamberlin, R.A., Bania, T.M., **Bolatto**, A.D., Jackson, J.M., & Wright, G.A. 2001, “AST/RO Observations of Atomic Carbon near the Galactic Center”, *Astrophysical Journal*, 548, 253.
- 12) **Bolatto**, A.D., Jackson, J.M., Israel, F.P., Zhang, X., & Kim, S. 2000, “Carbon in the N159/N160 Complex of the Large Magellanic Cloud”, *Astrophysical Journal*, 545, 234.
- 11) **Bolatto**, A. D., Jackson, J. M., Kraemer, K. E., & Zhang, X. 2000, “First Detection of Submillimeter [C I] Emission in the Small Magellanic Cloud”, *Astrophysical Journal Letters*, 541, L17.
- 10) Smith, N., Jackson, J.M., Kraemer, K.E., Deutsch, L.K., **Bolatto**, A.D., Hora, J.L., Fazio, G., Hoffman, W.F., & Dayal, A. 2000, “Thermal Infrared Imaging of Ultracompact H II Regions in W49A”, *Astrophysical Journal*, 540, 316.
- 9) **Bolatto**, A.D., Jackson, J.M., Wilson, C.D., & Moriarty-Schieven, G. 2000, “Submillimeter Observations of IC 10: the Dust Properties and Neutral Carbon Content of a Low Metallicity Starburst”, *Astrophysical Journal*, 532, 909.
- 8) Huang, M., Bania, T.M., **Bolatto**, A.D., Chamberlin, R.A., Ingalls, J.G., Jackson, J.M., Lane, A.P., Stark, A.A., Wilson, R.W., & Wright, G.A. 1999, “Atomic Carbon Observations of Southern Hemisphere H II Regions”, *Astrophysical Journal*, 517, 82.

- 7) **Bolatto**, A.D., Jackson, J.M., & Ingalls, J.G. 1999, “A Semianalytical Model for the Observational Properties of the Dominant Carbon Species at Different Metallicities”, *Astrophysical Journal*, 513, 275.
- 6) Paglione, T.A.D., Jackson, J.M., **Bolatto**, A.D., & Heyer, M.H. 1998, “Interpreting the HCN/CO Intensity Ratio in the Galactic Center”, *Astrophysical Journal*, 493, 680.
- 5) Stark, A.A., **Bolatto**, A.D., Chamberlin, R.A., Lane, A.P., Bania, T.M., Jackson, J.M., & Lo, K.-Y. 1997, “First Detection of 492 GHz [C I] Emission from the Large Magellanic Cloud”, *Astrophysical Journal Letters*, 480, L59.
- 4) Kraemer, K.E., Jackson, J.M., Paglione, T.A.D., & **Bolatto**, A.D. 1997, “A 2000  $M_{\odot}$  Rotating Molecular Disk around NGC 6334A”, *Astrophysical Journal*, 478, 614.
- 3) Jackson, J.M., Heyer, M.H., Paglione, T.A.D., & **Bolatto**, A.D. 1996, “HCN and CO in the Central 630 Parsecs of the Galaxy”, *Astrophysical Journal Letters*, 456, L91.
- 2) **Bolatto**, A.D., Fernández, J.A., & Carballo, G.F. 1995, “Asymmetric Nongravitational Forces on Long-Period Comets”, *Planetary and Space Science*, 43, 709.
- 1) **Bolatto**, A.D., & Falco, E.E. 1994, “The Detectability of Planetary Companions of Compact Galactic Objects from their Effects on Microlensed Light Curves of Distant Stars”, *Astrophysical Journal*, 436, 112.

**Publications** *in Preparation*

- Bolatto**, A. D., Leroy, A., & Walter, F., “Resolved Molecular Cloud Properties in Dwarf Galaxies”
- Sandstrom, K., **Bolatto**, A. D., et al., “The *Spitzer* Survey of the Small Magellanic Cloud: The Radio Far Infrared Correlation in the SMC”
- Bolatto**, A. D., Simon, J. D., van Loom, J., & Chiang, E., “Dusty Early-B Stars in the Small Magellanic Cloud: Candidate Debris Disk Systems?”
- Bolatto**, A. D., Leroy, A., & Darling, J., “A search for radio selected high-redshift HI absorbers at the GBT”

**Publications** *in Conference Proceedings*

- 46) Sandstrom, K. M., **Bolatto**, A. D., et al. 2006, “Spitzer Observations of the Far-Infrared Radio Continuum Correlation in the Small Magellanic Cloud”, American Astronomical Society Meeting 209, 17807.
- 45) Bower, G. C., Saul, D., Bloom, J., **Bolatto**, A. D., Filippenko, A., Foley, R., & Stern, D. 2006, “Sub-millijansky Flashes in the Radio Sky”, HEAD Meeting, 9, 1849.
- 44) Shiao, Y.-S., Looney, L. W., Woody, D. P., Plambeck, R. L., & **Bolatto**, A. D., 2006, “Water vapor in the atmosphere: an examination for CARMA phase correction”, Proceedings of the International Society for Optical Engineering, 6275, 30.
- 43) Bock, D. C., **Bolatto**, A. D., et al. 2006, “First results from CARMA: the combined array for research in millimeter-wave astronomy”, 6275, 36.
- 42) Nikola, T., Stacey, G. J., Bradford, C. M., **Bolatto**, A. D., Higdon, S. J., Isaak, K., & Israel, F. P. 2006, “Mapping of Nearby Galaxies in [CI]  $370 \mu\text{m}$  and CO ( $7 \rightarrow 6$ )  $371 \mu\text{m}$ ”, in “Mapping the Galaxy and Nearby Galaxies”, K. Wada & F. Combes eds., published by Springer-Verlag, in press.
- 41) Navarrini, A., **Bolatto**, A. D., & Plambeck, R. L. 2006, “Tests of a 1mm Band Turnstile Junction Waveguide Ortho-Mode Transducer”, in “Proceedings of the 17th International Symposium on Space Terahertz Technology”, published by IEEE press, in press.
- 40) Sandstrom, K., **Bolatto**, A. D., Leroy, A., Stanimirović, S., Simon, J. D., Staveley-Smith, L., & Shah, R. Y. 2006, “The Far-IR Radio Continuum Correlation in the Small Magellanic Cloud”, in “Infrared Diagnostics of Galaxy Evolution”. Edited by L. Armus, in press.

- 39) Leroy, A., **Bolatto**, A. D., Stanimirović, S., Sandstrom, K., Simon, J. D., Bot, C., Shah, R. Y., & Jackson, J. M. 2006, “Dust, Atomic, and Molecular Gas in the Nearest Primitive Environment”, in “Infrared Diagnostics of Galaxy Evolution”. Edited by L. Armus, in press.
- 38) Simon, J. D., **Bolatto**, A. D., Stanimirović, S., Shah, R. Y., Leroy, A., & Sandstrom, K. 2006, “Infrared Sources in the Small Magellanic Cloud: First Results”, in “Infrared Diagnostics of Galaxy Evolution”. Edited by L. Armus, in press.
- 37) Stanimirović, S., **Bolatto**, A. D., et al. 2006, “The young SNR 1E 0102.2-7219: testing dust formation in primordial galaxies”, in “Infrared Diagnostics of Galaxy Evolution”. Edited by L. Armus, in press.
- 36) **Bolatto**, A. D., et al. 2005, “Spitzer Observations of the Magellanic Clouds”, American Astronomical Society Meeting, 207, 14504.
- 35) Stanimirović, S., **Bolatto**, A. D., Leroy, A. K., Shah, R., Simon, J. D., Sandstrom, K., Jackson, J. M., Li, A., Israel, F. P., Staveley-Smith, L. 2005, “Spitzer far infrared imaging of the Small Magellanic Cloud: first results”, American Astronomical Society Meeting, 206, 1212.
- 34) Woody, D. P., Beasley, A. J., **Bolatto**, A. D., and 9 more authors 2004, “CARMA: a new heterogeneous millimeter-wave interferometer”, Proceedings of the International Society for Optical Engineering, 5498, 30.
- 33) **Bolatto**, A. D. 2004, “The CARMA Array”, in “The Dusty and Molecular Universe: A Prelude to Herschel and ALMA”. Edited by A. Wilson (ESA Conference Series).
- 32) **Bolatto**, A. D., Leroy, A., J. D. Simon, & Blitz, L. 2004, “The Relationship Between Molecular Gas and Star Formation in Large and Small Galaxies”, in “The Dusty and Molecular Universe: A Prelude to Herschel and ALMA”. Edited by A. Wilson (ESA Conference Series).
- 31) Johnson, A. M., Jackson, J. M., Shah, R. Y., Simon, R., **Bolatto**, A. D., & di Francesco, J. D., “The Structure of GRSMC 45.46+0.05”, in “Milky Way Surveys: The Structure and Evolution of our Galaxy” (proceedings of ASP conference 317). Edited by D. Clemens, R. Shah, and T. Brainerd (ASP), 91.
- 30) **Bolatto**, A. D., J. D. Simon, Leroy, A., & Blitz, L. 2004, “Dark Matter in Dwarf Galaxies: High Resolution Observations”, in “IAP conference proceedings of IAU Symp. 220: Dark Matter in Galaxies”. Edited by S. D. Ryder, D. J. Pisano, M. A. Walker, and K. C. Freeman (ASP), 353.
- 29) **Bolatto**, A. D., Leroy, A., J. D. Simon, & Blitz, L. 2003, “Molecular Gas in Dwarf Galaxies: Single Dish and Interferometric Results”, in “The Dense Interstellar Medium in Galaxies”. Edited by S. Pflanzner, C. Kramer, C. Staubmeier, and A. Heithausen (Springer), 155.
- 28) Simon, J. D., **Bolatto**, A. D., Leroy, A., & Blitz, L. 2003, “Dark Matter in Dwarf Galaxies: Latest Density Profile Results”, in IAP conference proceedings of Satellites and Tidal Streams, in press.
- 27) Bower, G. C., Plambeck, R., & **Bolatto**, A. 2003, “Flaring Object in Orion Cluster”, International Astronomical Union Circulars, 8055, 2.
- 26) Bradford, C. M., Nikola, T., Stacey, G. J., **Bolatto**, A. D., Jackson, J. M., Savage, M. L., Davidson, J. A., & Higdon, S. J. 2002, “Cosmic-Ray Heated Molecular Gas in NGC 253.”, American Astronomical Society Meeting, 201, 2607.
- 25) Johnson, A., Jackson, J. M., Shah, R. Y., Simon, R., **Bolatto**, A., & Di Francesco, J. 2002, “The Structure of GRSMC045.46+0.05”, American Astronomical Society Meeting, 201, 11219.
- 24) Stacey, G. J. et al. 2002, “Direct Detection Spectroscopy in the 350  $\mu\text{m}$  Window: SPIFI on the JCMT”, EAS Publications Series, Volume 4, Proceedings of Infrared and Submillimeter

- Space Astronomy, held 11-13 June, 2001. Edited by M. Giard, J.P. Bernanrd, A. Klotz, and I. Ristorcelli (EDP Sciences), 2002, 4, 419.
- 23)** Leroy, A., **Bolatto**, A. D., Simon, J. D., Blitz, L.,& Israel, F. P. 2001, “High Resolution Millimeter–Submillimeter Observations of Dwarf Galaxies”, American Astronomical Society Meeting, 198, 0912.
- 22)** **Bolatto**, A. D., Leroy, A., Simon, J. D.,& Blitz, L. 2001, “The Central Density Profile of the Dark Matter-Dominated Dwarf NGC 4605”, American Astronomical Society Meeting, 198, 2102.
- 21)** **Bolatto**, A., Jackson, J., Israel, F., Zhang, X.,& Stark, A. 2001, “Millimeter and Submillimeter Observations of N159/N160 in the LMC”, ASP Conf. Ser. 235: Science with the Atacama Large Millimeter Array, 301.
- 20)** Huang, M. et al. 2000, “AST/RO Mapping Observations of HII Regions in [CI]”, American Astronomical Society Meeting, 197, 4310.
- 19)** Bradford, C. M., Stacey, G. J., Nikola, T., Swain, M. R., **Bolatto**, A. D., Jackson, J. M., Savage, M. L.,& Davidson, J. A. 1999, “Direct Detection CO 7-6 Spectroscopy of the Galactic Center and Starburst Galaxies: SPIFI at the JCMT”, Bulletin of the American Astronomical Society, 31, 1477.
- 18)** **Bolatto**, A. D., Jackson, J. M., Wilson, C. D.,& Zhang, X. 1999, “Photodissociation Regions in the Large Magellanic Cloud and IC 10”, IAU Symp. 190: New Views of the Magellanic Clouds, 190, 128.
- 17)** Yam, O., Paglione, T. A. D., Jackson, J. M.,& **Bolatto**, A. D. 1998, “The properties of the dense molecular gas in the Galactic center”, IX Latin American Regional IAU Meeting, “Focal Points in Latin American Astronomy”, held in Tonantzintla, Mexico, Nov. 9-13, 1998, Eds: A. Aguilar & A. Carramiñana; Revista Mexicana de Astronomia y Astrofisica Conference Series.
- 16)** Swain, M. R., Bradford, C. M., Stacey, G. J., **Bolatto**, A. D., Jackson, J. M., Savage, M. L.,& Davidson, J. A. 1998, “Design of the South Pole imaging Fabry-Perot interferometer (SPIFI)”, Proceedings of the International Society for Optical Engineering, 3354, 480.
- 15)** Huang, M. et al. 1998, “AST/RO Observations of [CI] in Galactic HII Regions”, Bulletin of the American Astronomical Society, 30, 905.
- 14)** Jackson, J. M. et al. 1998, “AST/RO [CI] and CO 4-3 Observations of the NGC 6334 Star Forming Region”, Bulletin of the American Astronomical Society, 30, 905.
- 13)** **Bolatto**, A. D. et al. 1998, “AST/RO Observations of Photodissociations Regions in a Metal-Poor Environment”, Bulletin of the American Astronomical Society, 30, 904.
- 12)** Ojha, R. et al. 1998, “AST/RO Observations of Atomic Carbon in the Galactic Center”, Bulletin of the American Astronomical Society, 30, 904.
- 11)** Bania, T. M. et al. 1998, “AST/RO CO (4-3) Observations of the Central Kiloparsec of the Milky Way”, Bulletin of the American Astronomical Society, 30, 904.
- 10)** Huang, M. et al. 1998, “Atomic Carbon in Galactic H II Regions”, ASP Conf. Ser. 141: Astrophysics From Antarctica, 192.
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- 3) Paglione, T., Jackson, J., Heyer, M., & **Bolatto**, A. 1996, “Dense Molecular Gas in the Central 630 Parsecs of the Milky Way”, *Bulletin of the American Astronomical Society*, 28, 888.
- 2) **Bolatto**, A. D. & Falco, E. E. 1993, “The MACHO Effect of Binaries and Planetary Systems”, *Revista Mexicana de Astronomía y Astrofísica*, vol. 26, 26, 116.
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**Publications** *Memoranda & Technical Documents*

- 8) Navarrini, A., **Bolatto**, A. D., & Plambeck, R. L. 2006, “Preliminary Test Results of the Turnstile Junction Waveguide Orthomode Transducer for the 1 mm Band”, *CARMA Memoranda Series #32*.
- 7) **Bolatto**, A. D. 2004, “IF Module Software Documentation”, *CARMA Memoranda Series #28*.
- 6) **Bolatto**, A. D. 2004, “Grounding Considerations for CARMA”, *CARMA Memoranda Series #26*.
- 5) **Bolatto**, A. D. 2003, “DAQcore: A General Purpose Data Acquisition CANbus Node”, *CARMA Memoranda Series #13*.
- 4) **Bolatto**, A. D. 2003, “A CANbus Replacement for the BIMA Antenna Telemetry”, *BIMA Memoranda Series #94*.
- 3) **Bolatto**, A. D. 2000, “Radio Pointing Procedure Documentation”, *AST/RO Technical Memorandum #38*.
- 2) **Bolatto**, A. D. 1998, “New Chopper Interface Documentation”, *AST/RO Technical Memorandum #31*.
- 1) Castro, E., & **Bolatto**, A. D. 1994, “Interfacing the Fineserv Chopper Controller Under Lynxx”, *AST/RO Technical Memorandum #20*.

**Talks**

*Selected*

- Contributing speaker, *The Evolving ISM in the Milky Way and Nearby Galaxies* Pasadena, California, December 2007
- Contributing speaker, *IAU XIIth Latin-American Regional Meeting* Isla Margarita, Venezuela, October 2007
- Colloquium, *Boston University Department of Astronomy* Boston, Massachusetts, September 2007
- Contributing speaker, *Elizabeth and Frederick White Conference on the Magellanic System* Sydney, Australia, July 2007
- Contributing speaker, *Galaxies in the Local Volume* Sydney, Australia, July 2007

- Contributing speaker, *HI Survival Through Cosmic Time*  
Abazzia d'Spineto, Italy, June 2007
- Colloquium, *U. of Maryland Department of Astronomy*  
College Park, Maryland, February 2007
- Colloquium, *Institute for Astronomy*  
Hilo, Hawaii, February 2007
- Colloquium, *U.C. Santa Cruz Department of Astronomy*  
Santa Cruz, California, January 2007
- Seminar, *Max Planck Institute for Extraterrestrial Physics*  
Garching, Germany, October 2006
- Contributing speaker, *Water Vapor Radiometry Workshop*  
Wettzell, Germany, October 2006
- Colloquium, *National Radio Astronomy Observatory*  
Charlottesville, Virginia, April 2006
- Invited speaker, *Ringberg Symp.: Dwarf Galaxies as Astrophysical and Cosmological Probes*  
Ringberg Castle, Germany, March 2006
- Colloquium, *U.C. Berkeley Department of Astronomy*  
Berkeley, California, February 2006
- Invited speaker, *AAS Magellanic Clouds Special Session*  
Washington D.C., January 2006
- Contributing speaker, *IAU XIth Latin-American Regional Meeting*  
Pucón, Chile, December 2005
- Invited speaker, *Dynamics of Galaxies: Baryons and Dark Matter*  
Las Vegas, Nevada, March 2005
- Invited speaker, *Dusty 2004: A Prelude to Herschel and ALMA*  
Paris, France, October 2004
- Colloquium, *Herzberg Institute of Astronomy*  
Victoria, Canada, March 2005
- Colloquium, *University of British Columbia Dept. of Physics and Astronomy*  
Vancouver, Canada, March 2005
- Seminar, *Very Large Array Operations Center*  
Socorro, New Mexico, June 2004
- Contributing speaker, *4th Cologne-Bonn-Zermatt Symp.: The Dense ISM in Galaxies*  
Zermatt, Switzerland, September 2003
- Contributing speaker, *IAU 24th General Assembly Symp. 220: Dark Matter in Galaxies*  
Sydney, Australia, July 2003