

Amir Hajian | Curriculum Vitae

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Current Position

Senior Research Associate

Canadian Institute for Theoretical Astrophysics, Toronto

CITA

Since Aug. 2014

Education

Postdoctoral Fellow

Canadian Institute for Theoretical Astrophysics,

2010- 2014

Postdoc

Princeton University,

2006-2010

PhD

Inter University Centre for Astronomy and Astrophysics, IUCAA

2008

M.Sc.

Institute for Advanced Studies in Basic Sciences, IASBS

2002

B.Sc.

Sharif University of Technology,

1999

Ph.D. thesis

title: *Cosmology with CMB Anisotropy*

supervisors: Tarun Souradeep

Master thesis

title: *Theory of Bosonic Membranes, Gauge symmetries and M(atrix) Model*

supervisors: Amir H. Fathollahi

Research Interests

- Theoretical Astrophysics and Cosmology;
- Astrophysical Data Analysis;
- Developing Statistical and Machine Learning Tools for Astrophysics.

Scholarships & Awards

Research Scholarship:	IUCAA	2001-2006
Gold Medal:	for Distinguished PhD Work of Iranian Student in India	2005
Predoctoral visitorship:	at Canadian Institute for Theoretical Astrophysics (CITA)	2005

Selected Publications

List of selected publications in refereed journals. For the full list see the Publications List attached:

- **Hajian, A.**, Alvarez, M., Bond, J. R., "Machine Learning Etudes in Astrophysics: Selection Functions for Mock Cluster Catalogs", arXiv:1409.1576.
- **Hajian, A.**, Battaglia, N., Spergel, D., Bond, J.R., Pfrommer, C., Sievers, J., "Measuring the Thermal Sunyaev-Zel'dovich Effect Through the Cross Correlation of Planck and WMAP Maps with ROSAT Galaxy Cluster Catalogs", JCAP11(2013)064.
- Hincks, A., **Hajian, A.**, Addisson, G., "A High-Significance Measurement of Correlation Between Unresolved IRAS Sources and Optically-Selected Galaxy Clusters", JCAP 05:004 (2013).
- Aslanbeigi, S., Lavaux, G., **Hajian, A.**, Afshordi, N., "An Optimal and Model-Independent Measurement of the Intracluster Pressure Profile I: Methodology and First Applications", MNRAS, 2086, (2013)
- Mody, K. and **Hajian, A.**, "One Thousand and One Clusters: Measuring the Bulk Flow with the Planck ESZ and X-Ray Selected Galaxy Cluster Catalogs", ApJ 785, (2012).
- **Hajian, A.** et al, 2012, "Correlations in the (Sub)millimeter background from ACT×BLAST", ApJ, Volume 744, Issue 1, article id. 40 (2012)
- **Hajian, A.**, 2011 "Are There Echoes From The Pre-Big Bang Universe? A Search for Low Variance Circles in the CMB Sky", ApJ, Volume 740, Issue 2, article id. 52 (2011)
- **Hajian, A.** et al., 2011, "The Atacama Cosmology Telescope: Calibration with WMAP Using Cross-Correlations", ApJ, Volume 740, Issue 2, article id. 86 (2011)
- S. Das, **A. Hajian** and D. Spergel, "Efficient Power Spectrum Estimation for High Resolution CMB Maps", Phys. Rev. D 79, 083008 (2009)
e-Print: arXiv:0809.1092v1 [astro-ph]
- V. Acquaviva, **A. Hajian**, D. Spergel and S. Das, "Next Generation of Galaxy Redshift Surveys and the Origin of Cosmic Acceleration", Phys.Rev.D78:043514,2008.
e-Print: arXiv:0803.2236 [astro-ph]
- **A. Hajian**, C. Hernandez-Monteagudo, R. Jimenez, D. Spergel and L. Verde, "The Kinetic Sunyaev-Zel'dovich Effect Due to the Electrons of Our Galaxy", 2007, ApJ, 671, 1079.
e-Print: arXiv:0705.3245 [astro-ph].
- **A. Hajian**, "Efficient cosmological parameter estimation with Hamiltonian Monte Carlo", Phys. Rev. D 75, 083525 (2007)
e-Print: [arXiv:astro-ph/0608679].
- **A. Hajian**, T. Souradeep, "Testing Global Isotropy of Three-Year Wilkinson Microwave Anisotropy Probe (WMAP) Data: Temperature Analysis", Phys.Rev. D74 (2006) 123521
e-Print: [arxiv: astro-ph/0607153].
- **A. Hajian**, T. Souradeep, "Measuring Statistical Isotropy of CMB", Astrophys.J. 597 (2003) L5-L8.

Professional Experience

Panellist

National Science Foundation, Annual grant review 2009

Referee

Journals including, MNRAS, JCAP, The Astrophysical Journal 2006-today

Seminar Organizer

Gravity Group Seminars, Princeton University 2007-2008

Organizer

PUNCH, biweekly Python Lunch meetings at CITA 2012-today

Seminars and Conferences

Invited Speaker.....

- Cross Correlation Cosmology, Dec. 2013, Berkeley, CA.
- Microwave Sky Beyond CMB, Dec. 2013, 27th Texas Symposium on Relativistic Astrophysics, Dallas, Texas.
- Exploring more than CMB in the microwave sky using cross-correlations, October 2013, Cross-Correlating Cosmic Fields Conference, Shanghai, China.
- Cosmic Microwave Background: A Status Report, October 2013, 1st APCTP-NBIA joint workshop on Cosmology and Astroparticle Physics, Pohang, South Korea.
- Cosmic Infra-red Background in ACT, October 2012, CIBA Workshop, Banyuls, France.
- CMB: an overview, May 2013, Rochester Institute of Technology Astronomy Colloquium, NY.
- WMAP anomalies and violation of statistical isotropy, Dec. 2010, Primordial features and non-Gaussianities Conference, Allahabad, India.
- CMB and Cross Correlations, July 2013, Workshop on New Light in Cosmology from the CMB, Triested, Italy.
- Are There Echoes From The Pre-Big Bang Universe? A Search for Low Variance Circles in the CMB Sky, Feb. 2011, Perimeter Institute.
- Measuring Cosmic Infra-Red Background Using ACT and BLAST cross-correlations, Feb. 2011, University of Waterloo.

Contributed Talks.....

- Large Scale Bulk Flow in the Universe: Do We Need Modified Gravity?, July 2012, CCGRRA14, St. John's, Canada.
- Atacama Cosmology Telescope: Summary of Results, June 2012, CASCA2012, Calgary, Canada.
- Are There Echoes From The Pre-Big Bang Universe? A Search for Low Variance Circles in the CMB Sky, Feb. 2011, Perimeter Institute.
- Measuring Cosmic Infra-Red Background Using ACT and BLAST cross-correlations, Feb. 2011, Perimeter Institute.
- The Atacama Cosmology Telescope: Power Spectrum Methods, January 2010, American Astronomical Society, 215th AAS Meeting, Washington D.C.

- Testing Global Isotropy and Some Interesting Cosmological Models with CMB, September 2008, Workshop on Big Bang and Beyond, Princeton Center for Theoretical Science, Princeton.
- Distinguishing Dark Energy and Modified Gravity with Future Galaxy Redshift Surveys, May 2008, Milan, Italy.
- Large Scale Correlations in CMB Maps after WMAP5, May 2008, APC, Paris.
- Power Spectrum Estimation in High Resolution CMB Maps, January 2008, CMB Conference, Aspen.
- Are There Preferred Directions in the Universe? November 2006, UCLA, CA.
- Statistical Isotropy of the WMAP Data: Myths and facts about a preferred axis in the Universe; Cosmology seminar, Oct. 2006, Syracuse University, NY.
- Statistical isotropy of CMB anisotropy from WMAP; May 05, UC Davis, USA.
- Rotational Symmetries of CMB Statistics and Statistical Isotropy of the WMAP Data; April 05, CfA, Harvard, USA.
- Statistical Isotropy of CMB from WMAP Data; March 05, University of Oxford, UK.

Public Lectures :

- Persian Calendar: An Astronomical Perspective, a two session TV show for public on precision, astronomical roots and history of Iranian calendar. Winter 2008.
- Astronomical Basis and Historical Background of Persian Calendar: talk at the Near Eastern Studies program at Princeton University and two TV shows for Encyclopaedia Iranica (Center for Iranian Studies, Columbia University). Winter 2008.
- Cosmic Microwave Background Radiation and the Mysteries of the Universe; August 2003, SWAP (sky watchers association of Pune) - Akashmitra, Pune, India.
- What does CMB tell us about the Universe?; Sept. 2003, SWAP (sky watchers association of Pune) - Akashmitra, Pune, India.

Publications

- A. Hajian, M. Alvarez, and J. R. Bond, "Machine learning etudes in astrophysics: Selection functions for mock cluster catalogs," *arXiv preprint arXiv:1409.1576*, 2014.
- T. Louis, G. E. Addison, M. Hasselfield, J. R. Bond, E. Calabrese, S. Das, M. J. Devlin, J. Dunkley, R. Dünner, M. Gralla, *et al.*, "The atacama cosmology telescope: Cross correlation with planck maps," *arXiv preprint arXiv:1403.0608*, 2014.
- E. Calabrese, R. Hložek, N. Battaglia, J. R. Bond, F. de Bernardis, M. J. Devlin, A. Hajian, S. Henderson, J. C. Hil, A. Kosowsky, *et al.*, "Precision epoch of reionization studies with next-generation cmb experiments," *Journal of Cosmology and Astroparticle Physics*, vol. 2014, no. 08, p. 010, 2014.
- L. Wang, M. Viero, N. P. Ross, V. Asboth, M. Bethermin, J. Bock, D. Clements, A. Conley, A. Cooray, D. Farrah, *et al.*, "The co-evolution of black hole growth and star formation from a cross-correlation analysis between quasars and the cosmic infrared background," *arXiv preprint arXiv:1406.7181*, 2014.
- S. Naess, M. Hasselfield, J. McMahon, M. D. Niemack, G. E. Addison, P. A. Ade, R. Allison, M. Amiri, N. Battaglia, J. A. Beall, *et al.*, "The atacama cosmology telescope: Cmb polarization at $200 < \ell < 9000$," *Journal of Cosmology and Astroparticle Physics*, vol. 2014, no. 10, p. 007, 2014.
- A. Hajian and T. Souradeep, "Measuring the statistical isotropy of the cosmic microwave background anisotropy," *The Astrophysical Journal Letters*, vol. 597, p. L5, 2003.
- A. Hajian, T. Souradeep, and N. Cornish, "Statistical isotropy of the wilkinson microwave anisotropy probe data: a bipolar power spectrum analysis," *The Astrophysical Journal Letters*, vol. 618, p. L63, 2005.
- A. Hajian and T. Souradeep, "Testing global isotropy of three-year wilkinson microwave anisotropy probe (wmap) data: Temperature analysis," *Physical Review D*, vol. 74, no. 12, p. 123521, 2006.
- V. Acquaviva, A. Hajian, D. N. Spergel, and S. Das, "Next generation redshift surveys and the origin of cosmic acceleration," *Physical Review D*, vol. 78, no. 4, p. 043514, 2008.
- A. Hajian, "Efficient cosmological parameter estimation with hamiltonian monte carlo technique," *Physical Review D*, vol. 75, no. 8, p. 083525, 2007.
- A. Hajian, C. Hernández-Monteagudo, R. Jimenez, D. Spergel, and L. Verde, "The kinetic sunyaev-zel'dovich effect due to the electrons of our galaxy," *The Astrophysical Journal*, vol. 671, p. 1079, 2007.
- S. Das, A. Hajian, and D. N. Spergel, "Efficient power spectrum estimation for high resolution cmb maps," *Physical Review D*, vol. 79, no. 8, p. 083008, 2009.
- A. Hajian, V. Acquaviva, P. A. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, B. Brown, *et al.*, "The atacama cosmology telescope: Calibration with the wilkinson microwave anisotropy probe using cross-correlations," *The Astrophysical Journal*, vol. 740, p. 86, 2011.

- 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, *et al.*, "Correlations in the (sub) millimeter background from actxblast," *ApJ*, vol. 744, p. 40, Jan. 2012.
- A. Hajian, "Are there echoes from the pre-big-bang universe? a search for low-variance circles in the cosmic microwave background sky," *The Astrophysical Journal*, vol. 740, p. 52, 2011.
- K. Mody and A. Hajian, "One thousand and one clusters: Measuring the bulk flow with the planck esz and x-ray-selected galaxy cluster catalogs," *The Astrophysical Journal*, vol. 758, no. 1, p. 4, 2012.
- B. D. Sherwin, S. Das, A. Hajian, G. Addison, J. R. Bond, D. Crichton, M. J. Devlin, J. Dunkley, M. B. Gralla, M. Halpern, *et al.*, "The atacama cosmology telescope: Cross-correlation of cosmic microwave background lensing and quasars," *Physical Review D*, vol. 86, no. 8, p. 083006, 2012.
- A. D. Hincks, A. Hajian, and G. E. Addison, "A high-significance measurement of correlation between unresolved iras sources and optically-selected galaxy clusters," *Journal of Cosmology and Astroparticle Physics*, vol. 2013, no. 05, p. 004, 2013.
- A. Hajian, N. Battaglia, D. N. Spergel, J. R. Bond, C. Pfrommer, and J. L. Sievers, "Measuring the thermal sunyaev-zel'dovich effect through the cross correlation of planck and wmap maps with rosat galaxy cluster catalogs," *arXiv preprint arXiv:1309.3282*, 2013.
- J. Narlikar, R. Vishwakarma, A. Hajian, T. Souradeep, G. Burbidge, and F. Hoyle, "Inhomogeneities in the microwave background radiation interpreted within the framework of the quasi-steady state cosmology," *The Astrophysical Journal*, vol. 585, p. 1, 2003.
- J. Fowler, V. Acquaviva, P. Ade, P. Aguirre, M. Amiri, J. Appel, L. Barrientos, E. Battistelli, J. Bond, B. Brown, *et al.*, "The atacama cosmology telescope: A measurement of the 600« 8000 cosmic microwave background power spectrum at 148 ghz," *The Astrophysical Journal*, vol. 722, p. 1148, 2010.
- F. Menanteau, J. González, J.-B. Juin, T. A. Marriage, E. D. Reese, V. Acquaviva, P. Aguirre, J. W. Appel, A. J. Baker, L. F. Barrientos, *et al.*, "The atacama cosmology telescope: Physical properties and purity of a galaxy cluster sample selected via the sunyaev-zel'dovich effect," *The Astrophysical Journal*, vol. 723, p. 1523, 2010.
- T. Ghosh, A. Hajian, and T. Souradeep, "Unveiling hidden patterns in cmb anisotropy maps," *Physical Review D*, vol. 75, no. 8, p. 083007, 2007.
- S. Basak, A. Hajian, and T. Souradeep, "Statistical isotropy of cmb polarization maps," *Physical Review D*, vol. 74, no. 2, p. 021301, 2006.
- D. Swetz, P. Ade, C. Allen, M. Amiri, J. Appel, E. Battistelli, B. Burger, J. Chervenak, A. Dahlen, S. Das, *et al.*, "Instrument design and characterization of the millimeter bolometer array camera on the atacama cosmology telescope," *Proceedings of SPIE*, vol. 7020, p. 702008, 2008.
- T. Souradeep, A. Hajian, and S. Basak, "Measuring statistical isotropy of cmb anisotropy," *New Astronomy Reviews*, vol. 50, no. 11-12, pp. 889–895, 2006.

- A. Hincks, V. Acquaviva, P. Ade, P. Aguirre, M. Amiri, J. Appel, L. Barrientos, E. Battistelli, J. Bond, B. Brown, *et al.*, "The atacama cosmology telescope (act): Beam profiles and first sz cluster maps," *The Astrophysical Journal Supplement Series*, vol. 191, p. 423, 2010.
- N. Sehgal, H. Trac, V. Acquaviva, P. A. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, E. S. Battistelli, J. R. Bond, *et al.*, "The atacama cosmology telescope: Cosmology from galaxy clusters detected via the sunyaev-zel'dovich effect," *The Astrophysical Journal*, vol. 732, p. 44, 2011.
- T. Souradeep and A. Hajian, "Statistical isotropy of the cosmic microwave background," *Pramana*, vol. 62, no. 3, pp. 793–796, 2004.
- M. Niemack, P. Ade, J. Aguirre, F. Barrientos, J. Beall, J. Bond, J. Britton, H. Cho, S. Das, M. Devlin, *et al.*, "Actpol: A polarization-sensitive receiver for the atacama cosmology telescope," *Arxiv preprint arXiv:1006.5049*, 2010.
- T. A. Marriage, J. B. Juin, Y.-T. Lin, D. Marsden, M. R. Nolte, B. Partridge, P. A. Ade, P. Aguirre, M. Amiri, J. W. Appel, *et al.*, "The atacama cosmology telescope: Extragalactic sources at 148 ghz in the 2008 survey," *The Astrophysical Journal*, vol. 731, p. 100, 2011.
- 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, *et al.*, "Detection of the power spectrum of cosmic microwave background lensing by the atacama cosmology telescope," *Physical Review Letters*, vol. 107, no. 2, p. 21301, 2011.
- A. Hajian, "Analysis of the apparent lack of power in the cosmic microwave background anisotropy at large angular scales," *Arxiv preprint astro-ph/0702723*, 2007.
- J. Dunkley, R. Hlozek, J. Sievers, V. Acquaviva, P. Ade, P. Aguirre, M. Amiri, J. Appel, L. Barrientos, E. Battistelli, *et al.*, "The atacama cosmology telescope: Cosmological parameters from the 2008 power spectrum," *The Astrophysical Journal*, vol. 739, p. 52, 2011.
- A. Hajian and T. Souradeep, "Statistical isotropy of cmb and cosmic topology," *Arxiv preprint astro-ph/0301590*, 2003.
- N. Joshi, S. Jhingan, T. Souradeep, and A. Hajian, "Bipolar harmonic encoding of cmb correlation patterns," *Physical Review D*, vol. 81, no. 8, p. 083012, 2010.
- R. Hlozek, J. Dunkley, G. Addison, J. W. Appel, J. R. Bond, C. S. Carvalho, S. Das, M. Devlin, R. Dünner, T. Essinger-Hileman, *et al.*, "The atacama cosmology telescope: a measurement of the primordial power spectrum," *Arxiv preprint arXiv:1105.4887*, 2011.
- 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, *et al.*, "Evidence for dark energy from the cosmic microwave background alone using the atacama cosmology telescope lensing measurements," *Physical Review Letters*, vol. 107, no. 2, p. 21302, 2011.
- A. Hajian and T. Souradeep, "The cosmic microwave background bipolar power spectrum: basic formalism and applications," *Arxiv preprint astro-ph/0501001*, 2004.
- N. Hand, J. W. Appel, N. Battaglia, J. Richard Bond, S. Das, M. J. Devlin, J. Dunkley, R. Dünner, T. Essinger-Hileman, J. W. Fowler, *et al.*, "The atacama cosmology telescope: Detection of

sunyaev-zel'dovich decrement in groups and clusters associated with luminous red galaxies," *The Astrophysical Journal*, vol. 736, p. 39, 2011.

A. Cooray, S. Eales, S. Chapman, D. L. Clements, O. Dore, D. Farrah, M. J. Jarvis, M. Kaplinghat, M. Negrello, A. Melchiorri, *et al.*, "The herchel-spire legacy survey (hsls): the scientific goals of a shallow and wide submillimeter imaging survey with spire," 2010.

E. D. Reese, T. Mroczkowski, F. Menanteau, M. Hilton, J. Sievers, P. Aguirre, J. W. Appel, A. J. Baker, J. R. Bond, S. Das, *et al.*, "The atacama cosmology telescope: High-resolution sunyaev-zel'dovich array observations of act sze-selected clusters from the equatorial strip," *Arxiv preprint arXiv:1108.3343*, 2011.

A. Yzaguirre and A. Hajian, "Cosmic topology: Studying the shape and size of our universe," in *Bulletin of the American Astronomical Society*, vol. 42, p. 549, 2010.

A. Hajian and A. C. T. Team, "The atacama cosmology telescope: Power spectrum methods," in *Bulletin of the American Astronomical Society*, vol. 42, p. 599, 2010.

S. Das, B. D. Sherwin, P. Aguirre, J. W. Appel, J. R. Bond, C. S. Carvalho, M. J. Devlin, J. Dunkley, T. Essinger-Hileman, J. W. Fowler, *et al.*, "The atacama cosmology telescope: Detection of the power spectrum of gravitational lensing," *Arxiv preprint arXiv:1103.2124*, 2011.

G. E. Addison, J. Dunkley, A. Hajian, M. Viero, J. R. Bond, S. Das, M. Devlin, M. Halpern, A. Hincks, R. Hlozek, *et al.*, "Power-law template for ir point source clustering," *Arxiv preprint arXiv:1108.4614*, 2011.

C. Sifon, F. Menanteau, M. Hasselfield, T. A. Marriage, J. P. Hughes, L. F. Barrientos, J. Gonzalez, L. Infante, G. E. Addison, A. J. Baker, *et al.*, "The atacama cosmology telescope: Dynamical masses and scaling relations for a sample of massive sunyaev-zel'dovich effect selected galaxy clusters," *arXiv preprint arXiv:1201.0991*, 2012.

F. Menanteau, J. P. Hughes, C. Sifón, M. Hilton, J. González, L. Infante, L. F. Barrientos, A. J. Baker, J. R. Bond, S. Das, *et al.*, "The atacama cosmology telescope: Act-cl j0102–4915," *The Astrophysical Journal*, vol. 748, no. 1, p. 7, 2012.

M. J. Wilson, B. D. Sherwin, J. C. Hill, G. Addison, N. Battaglia, J. R. Bond, S. Das, M. J. Devlin, J. Dunkley, R. Dünner, *et al.*, "Atacama cosmology telescope: A measurement of the thermal sunyaev-zel'dovich effect using the skewness of the cmb temperature distribution," *Physical Review D*, vol. 86, no. 12, p. 122005, 2012.

N. Sehgal, G. Addison, N. Battaglia, E. S. Battistelli, J. R. Bond, S. Das, M. J. Devlin, J. Dunkley, R. Dünner, M. Gralla, *et al.*, "The atacama cosmology telescope: Relation between galaxy cluster optical richness and sunyaev-zel'dovich effect," *The Astrophysical Journal*, vol. 767, no. 1, p. 38, 2013.

N. Hand, G. E. Addison, E. Aubourg, N. Battaglia, E. S. Battistelli, D. Bizyaev, J. R. Bond, H. Brewington, J. Brinkmann, B. R. Brown, *et al.*, "Evidence of galaxy cluster motions with the kinematic sunyaev-zel'dovich effect," *Physical Review Letters*, vol. 109, no. 4, p. 041101, 2012.

R. Dünner, M. Hasselfield, T. A. Marriage, J. Sievers, V. Acquaviva, G. E. Addison, P. A. Ade, P. Aguirre, M. Amiri, J. W. Appel, *et al.*, "The atacama cosmology telescope: Data characterization and mapmaking," *The Astrophysical Journal*, vol. 762, no. 1, p. 10, 2013.

- H. Miyatake, A. J. Nishizawa, M. Takada, R. Mandelbaum, S. Mineo, H. Aihara, D. N. Spergel, S. J. Bickerton, J. R. Bond, M. Gralla, *et al.*, "Subaru weak lensing measurement of $az=0.81$ cluster discovered by the atacama cosmology telescope survey," *Monthly Notices of the Royal Astronomical Society*, vol. 429, no. 4, pp. 3627–3644, 2013.
- F. Menanteau, C. Sifón, L. F. Barrientos, N. Battaglia, J. R. Bond, D. Crichton, S. Das, M. J. Devlin, S. Dicker, R. Dünner, *et al.*, "The atacama cosmology telescope: Physical properties of sunyaev-zel'dovich effect clusters on the celestial equator," *The Astrophysical Journal*, vol. 765, no. 1, p. 67, 2013.
- J. L. Sievers, R. A. Hlozek, M. R. Nolta, V. Acquaviva, G. E. Addison, P. A. Ade, P. Aguirre, M. Amiri, J. W. Appel, L. F. Barrientos, *et al.*, "The atacama cosmology telescope: Cosmological parameters from three seasons of data," *arXiv preprint arXiv:1301.0824*, 2013.
- S. Das, T. Louis, M. R. Nolta, G. E. Addison, E. S. Battistelli, J. R. Bond, E. Calabrese, D. C. M. J. Devlin, S. Dicker, J. Dunkley, *et al.*, "The atacama cosmology telescope: temperature and gravitational lensing power spectrum measurements from three seasons of data," *arXiv preprint arXiv:1301.1037*, 2013.
- M. Hilton, M. Hasselfield, C. Sifón, A. J. Baker, L. F. Barrientos, N. Battaglia, J. R. Bond, D. Crichton, S. Das, M. J. Devlin, *et al.*, "The atacama cosmology telescope: the stellar content of galaxy clusters selected using the sunyaev-zel'dovich effect," *arXiv preprint arXiv:1301.0780*, 2013.
- J. Dunkley, E. Calabrese, J. Sievers, G. Addison, N. Battaglia, E. Battistelli, J. Bond, S. Das, M. Devlin, R. Dunner, *et al.*, "The atacama cosmology telescope: likelihood for small-scale cmb data," *arXiv preprint arXiv:1301.0776*, 2013.
- M. Hasselfield, M. Hilton, T. A. Marriage, G. E. Addison, L. F. Barrientos, N. Battaglia, E. S. Battistelli, J. R. Bond, D. Crichton, S. Das, *et al.*, "The atacama cosmology telescope: Sunyaev-zel'dovich selected galaxy clusters at 148 ghz from three seasons of data," *arXiv preprint arXiv:1301.0816*, 2013.
- E. Calabrese, R. A. Hlozek, N. Battaglia, E. S. Battistelli, J. R. Bond, J. Chluba, D. Crichton, S. Das, M. J. Devlin, J. Dunkley, *et al.*, "Cosmological parameters from pre-planck cmb measurements," *arXiv preprint arXiv:1302.1841*, 2013.
- S. Aslanbeigi, G. Lavaux, A. Hajian, and N. Afshordi, "An optimal and model-independent measurement of the intracluster pressure profile i: Methodology and first applications," *arXiv preprint arXiv:1304.6457*, 2013.
- D. Marsden, M. Gralla, T. A. Marriage, E. R. Switzer, B. Partridge, M. Massardi, G. Morales, G. Addison, J. R. Bond, D. Crichton, *et al.*, "The atacama cosmology telescope: Dusty star-forming galaxies and active galactic nuclei in the southern survey," *arXiv preprint arXiv:1306.2288*, 2013.
- M. Viero, V. Asboth, I. Roseboom, G. Marsden, L. Monceli, E. M. Cooper, M. Zemcov, G. Addison, A. Baker, A. Beelen, *et al.*, "The herschel stripe 82 survey (hers): Maps and early catalog," *arXiv preprint arXiv:1308.4399*, 2013.
- M. B. Gralla, D. Crichton, T. A. Marriage, W. Mo, P. Aguirre, G. E. Addison, V. Asboth, N. Battaglia, J. Bock, J. R. Bond, *et al.*, "A measurement of the millimeter emission and the sunyaev-zel'dovich effect associated with low-frequency radio sources," *arXiv preprint arXiv:1310.8281*, 2013.