

Graeme Erik Addison

Contact Information:

Telephone: +1 778 991 3303

Email: gaddison@jhu.edu

Nationality: Canadian / British

Date of Birth: 10 June 1987

Work Address:

Department of Physics and Astronomy

The Johns Hopkins University

3400 N. Charles Street

Baltimore, MD 21218

Employment:

Assistant Research Scientist, The Johns Hopkins University March 2015–
Supervisor: Professor Charles Bennett

CITA National Fellowship, University of British Columbia 2012–2015
Nominating Professor: Professor Mark Halpern

Education:

DPhil Astrophysics, University of Oxford; defended Oct 2012 2009–2012
Supervisor: Dr Joanna Dunkley
*The Clustering of Dusty Star-Forming Galaxies: Connecting CMB
Cosmology and Galaxy Evolution*

MPhys, First Class, University of Oxford 2005–2009

Recent talks:

CAS Wine & Cheese seminar, Johns Hopkins University (February 2017), *Cosmic
Inconsistency?*

COSMO-2016 conference, Ann Arbor, Michigan (August 2016), *Quantifying
discordance in the 2015 Planck CMB spectrum*

Friday Seminar Series, KICP, Chicago (February 2016), *Quantifying discordance in
the 2015 Planck CMB spectrum*

Teaching:

Supervising graduate students: Yajing Huang and Keisuke Osumi (Johns Hopkins University, March 2015 – present), Joshua Kable (Johns Hopkins University, October 2017 – present)

Supervising final-year undergraduate projects (summer 2014 – 2015), Gavin Noble (University of British Columbia) – *Calculating the angular bispectrum of Herschel / SPIRE maps* and Micah Brush (Simon Fraser University) – *A Spherical Wave Description of the Universe*

Supervising MPhys student Justin Alsing, University of Oxford, *Source counts of faint submillimeter galaxies* (2011 – 2012); awarded Johnson Memorial Prize for a MPhys Project in Astrophysics

Supervising MPhys student Michael Wilson, University of Oxford, *Constraints from the three-point correlation functions of ACT maps* (2011 – 2012), led to publication in Phys. Rev. D

Core Physics I: Classical Mechanics (first-year undergraduate course), tutor for Exeter College, University of Oxford (January – May 2011)

Computer skills:

Python, C/C++, IDL (Interactive Data Language), Mathematica

Other interests:

Tennis, running, rock music, football (soccer)

Peer-reviewed publications:

First-author papers

Addison, G. E., Watts, D. J., Bennett, C. L., Halpern, M., Hinshaw, G., Weiland, J., *Elucidating Λ CDM: Impact of Baryon Acoustic Oscillation Measurements on the Hubble Constant Discrepancy*, accepted for publication in the Astrophysical Journal (ApJ, Dec 2017), arXiv preprint 1707.06547

Addison, G. E., Huang, Y., Watts, D. J., Bennett, C. L., Halpern, M., Hinshaw, G., Weiland, J., *Quantifying Discordance in the 2015 Planck CMB Spectrum*, ApJ (2016), 828, 132

Addison, G. E., Hinshaw, G., Halpern, M., *Cosmological constraints from baryon acoustic oscillations and clustering of large-scale structure*, Monthly Notices of the Royal Astronomical Society (MNRAS; 2013), 436, 1674

Addison, G. E., Dunkley, J., Bond, J. R., *Constraining thermal dust emission in distant galaxies with number counts and angular power spectra*, MNRAS (2013), 436, 1896

Addison, G. E., Dunkley, J., Spergel, D. N., *Modelling the correlation between the thermal Sunyaev Zel'dovich effect and the cosmic infrared background*, MNRAS (2012), 427, 1741

Addison, G. E., Dunkley, J., Hajian, A., Viero, M., and 14 additional authors, *Power-Law Template for IR Point Source Clustering*, ApJ (2012), 752, 120

Additional-author papers

Louis, T., Grace, E., Hasselfield, M., Lungu, M., Loic, M., **Addison, G. E.**, and 77 additional authors, *The Atacama Cosmology Telescope: The Atacama Cosmology Telescope: two-season ACTPol spectra and parameters*, Journal of Cosmology and Astroparticle Physics (JCAP; 2017), 06, 031

Sherwin, B. D., van Engelen, A., Sehgal, N., Madhavacheril, M., **Addison, G. E.**, and 41 additional authors, *The Atacama Cosmology Telescope: Two-Season ACTPol Lensing Power Spectrum*, Physical Review D (PRD; 2017), 95, 123529

Van Engelen, A., Sherwin, B. D., Sehgal, N., **Addison, G. E.**, and 48 additional authors, *The Atacama Cosmology Telescope: Lensing of CMB Temperature and Polarization Derived from Cosmic Infrared Background Cross-correlation*, ApJ (2015), 808, 7

Hand, N., Leauthaud, A., Das, S., Sherwin, B. D., **Addison, G. E.**, and 31 additional

authors, *First measurement of the cross-correlation of CMB lensing and galaxy lensing*, PRD (2015), 91, 6, 062001

Gralla, M. B., Crichton, D., Marriage, T. A., Mo, W., Aguirre, P., **Addison, G. E.**, and 35 additional authors, *A measurement of the millimetre emission and the Sunyaev-Zel'dovich effect associated with low-frequency radio sources*, MNRAS (2014), 445, 460

Næss, S., Hasselfield, M., McMahon, J., Niemack, M. D., **Addison, G. E.**, and 73 additional authors, *The Atacama Cosmology Telescope: CMB polarization at $200 < \ell < 9000$* , JCAP (2014), 10, 007

Bandura, K., **Addison, G. E.**, and 32 additional authors, *Canadian Hydrogen Intensity Mapping Experiment (CHIME) pathfinder*, Proceedings of the SPIE (2014), 9145, 22

Newburgh, L. B., **Addison, G. E.**, and 33 additional authors, *Calibrating CHIME: a new radio interferometer to probe dark energy*, SPIE (2014), 9145, 4

Louis, T., **Addison, G. E.**, Hasselfield, M., and 26 additional authors, *The Atacama Cosmology Telescope: Cross Correlation with Planck maps*, JCAP (2014), 07, 016

Marsden, D., Gralla, M., Marriage, T. A., Switzer, E. R., Partridge, B., Massardi, M., Morales, G., **Addison, G. E.**, and 23 additional authors, *The Atacama Cosmology Telescope: dusty star-forming galaxies and active galactic nuclei in the Southern survey*, MNRAS (2014), 439, 1556

Das, S., Louis, T., Nolta, M. R., **Addison, G. E.**, and 40 additional authors, *The Atacama Cosmology Telescope: temperature and gravitational lensing power spectrum measurements from three seasons of data*, JCAP (2014), 04, 014

Viero, M. P., Asboth, V., Roseboom, I. G., Moncelsi, L., Marsden, G., Mentuch Cooper, E., Zemcov, M., **Addison, G. E.**, and 31 additional authors, *The Herschel Stripe 82 Survey (HerS): Maps and Early Catalog*, Astrophysical Journal Supplement (ApJS; 2014), 210, 22

Sievers, J. L., Hlozek, R. A., Nolta, M. R., Acquaviva, V., **Addison, G. E.**, and 88 additional authors, *The Atacama Cosmology Telescope: cosmological parameters from three seasons of data*, JCAP (2013), 10, 060

Dunkley, J., Calabrese, E., Sievers, J., **Addison, G. E.**, and 31 additional authors, *The Atacama Cosmology Telescope: likelihood for small-scale CMB data*, JCAP (2013), 07, 025

Hasselfield, M., Hilton, M., Marriage, T. A., **Addison, G. E.**, and 40 additional authors, *The Atacama Cosmology Telescope: Sunyaev-Zel'dovich selected galaxy clusters at 148 GHz from three seasons of data*, JCAP (2013), 07, 008

Viero, M. P., Wang, L., Zemcov, M., **Addison, G. E.**, and 50 additional authors, *HERMES: Cosmic Infrared Background Anisotropies and the Clustering of Dusty Star-forming Galaxies*, ApJ (2013), 772, 77

Sifón, C., Menanteau, F., Hasselfield, M., Marriage, T. A., Hughes, J. P., Barrientos, L. F., González, J., Infante, L., **Addison, G. E.**, and 27 additional authors, *The Atacama Cosmology Telescope: Dynamical Masses and Scaling Relations for a Sample of Massive Sunyaev-Zel'dovich Effect Selected Galaxy Clusters*, ApJ (2013), 772, 25

Hincks, A. D., Hajian, A., **Addison, G. E.**, *A high-significance measurement of correlation between unresolved IRAS sources and optically-selected galaxy clusters*, JCAP (2013), 05, 004

Sehgal, N., **Addison, G. E.**, and 34 additional authors, *The Atacama Cosmology Telescope: Relation between Galaxy Cluster Optical Richness and Sunyaev-Zel'dovich Effect*, ApJ (2013), 767, 38

Dünner, R., Hasselfield, M., Marriage, T. A., Sievers, J., Acquaviva, V., **Addison, G. E.**, and 68 additional authors, *The Atacama Cosmology Telescope: Data Characterization and Mapmaking*, ApJ (2013), 762, 10

Wilson, M. J., Sherwin, B. D., Hill, J. C., **Addison, G. E.**, and 34 additional authors, *Atacama Cosmology Telescope: A measurement of the thermal Sunyaev-Zel'dovich effect using the skewness of the CMB temperature distribution*, PRD (2012), 86, 12, 2005

Sherwin, B., Das, S., Hajian, A., **Addison, G. E.**, and 27 additional authors, *The Atacama Cosmology Telescope: Cross-correlation of cosmic microwave background lensing and quasars*, PRD (2012), 86, 8, 3006

Nick, H., **Addison, G. E.**, and 56 additional authors, *Evidence of Galaxy Cluster Motions with the Kinematic Sunyaev-Zel'dovich Effect*, Physical Review Letters (PRL; 2012), 109, 4, 1101

Hlozek, R., Dunkley, J., **Addison, G. E.**, and 37 additional authors, *The Atacama Cosmology Telescope: A Measurement of the Primordial Power Spectrum*, ApJ (2012), 749, 90

Hajian, A., Viero, M. P., **Addison, G. E.**, and 43 additional authors, *Correlations in the (Sub)millimeter Background from ACT and BLAST*, ApJ (2012), 744, 40