Publication list

I have co-authored 79 scientific articles intended for peer-reviewed publication, including 7 first-author papers. They have been cited more than 3,500 times and have an h-index of 34, with more than 290 citations on my first-author papers. My publications include three companion reviews on galaxy alignments written for a special issue of Space Science Reviews (B. Joachimi et al. 2015, A. Kiessling et al. 2015, D. Kirk et al. 2015). The full list of publications can be accessed at this url. I also wrote an invited 'News & Views' article for the 4 July 2017 edition of Nature Astronomy, accessible here. This document is maintained live on `github`.

First-Author Papers

7. **C. Sifón**, R. Herbonnet, H. Hoekstra, R. F. J. van der Burg, M. Viola, **"The Galaxy-Subhalo Connection in Low-Redshift Galaxy Clusters from Weak Gravitational Lensing"**, 2018, MNRAS, 478, 1244 [arXiv]

6. **C. Sifón**, R. F. J. van der Burg, H. Hoekstra, A. Muzzin, R. Herbonnet, **"A First Constraint on the Average Mass of Ultra Diffuse Galaxies from Weak Gravitational Lensing"**, 2018, MNRAS, 473, 3747 [arXiv]

5. **C. Sifón** et al. (25 co-authors), **"The Atacama Cosmology Telescope: Dynamical Masses for 44 SZ-Selected Galaxy Clusters over 755 Square Degrees"**, 2016, MNRAS, 461, 248 [arXiv]

4. **C. Sifón** et al. (26 co-authors), **"The Masses of Satellites in GAMA Galaxy Groups from 100 Square Degrees of KiDS Weak Lensing Data"**, 2015, MNRAS, 454, 3938 [arXiv]

3. **C. Sifón**, H. Hoekstra, M. Cacciato, M. Viola, F. Köhlinger, R. F. J. van der Burg, D. J. Sand, M. L. Graham, **"Constraints on the Alignments of Galaxies in Galaxy Clusters from ∼14,000 Spectroscopic Members"**, 2015, A&A, 575, A48 [arXiv]

2. **C. Sifón**, F. Menanteau, J. P. Hughes, M. Carrasco, L. F. Barrientos, **"Strong Lensing Analysis of PLCK G004.5−19.5, a Planck-Discovered Cluster Hosting a Radio Relic at $z = 0.52$"**, 2014, A&A, 562, A43 [arXiv]

1. **C. Sifón** et al. (36 co-authors), **"The Atacama Cosmology Telescope: Dynamical Masses and Scaling Relations for a Sample of Massive Sunyaev-Zel'dovich Effect Selected Galaxy Clusters"**, 2013, ApJ, 772, 25 [arXiv]

Major Contributor Papers

14. M. Hilton, **C. Sifón**, et al. (133 co-authors), **"The Atacama Cosmology Telescope: a Catalog of >4000 Sunyaev-Zel'dovich Galaxy Clusters"**, 2020, arXiv:2009.11043, submitted to ApJS

13. M. S. Madhavacheril, **C. Sifón**, et al. (61 co-authors), **"The Atacama Cosmology Telescope: Weighing Distant Clusters with the Most Ancient Light"**, 2020, arXiv:2009.07772, submitted to ApJL

12. R. Herbonnet, **C. Sifón**, H. Hoekstra, Y. Bahé, R. F. J. van der Burg, J.-B. Melin, A. von der Linden, D. Sand, S. Kay, D. Barnes, **"CCCP and MENeaCS: (Updated) Weak-Lensing Masses for 100 Galaxy Clusters"**, 2020, MNRAS, 497, 4684 [arXiv]

11. M. Hilton, M. Hasselfield, **C. Sifón**, et al. (43 co-authors), **"The Atacama Cosmology Telescope: The Two-Season ACTPol Sunyaev-Zel'dovich Effect Selected Cluster Catalog"**, 2018, ApJS, 235, 20 [arXiv]

10. J. G. Albert, **C. Sifón**, A. Stroe, F. Mernier, H. T. Intema, H. J. A. Röttgering, G. Brunetti, **"Complex Diffuse Emission in the $z = 0.52$ Cluster PLCK G004.5−19.5"**, 2017, A&A, 607, A4 [arXiv]

9. R. F. J. van der Burg, H. Hoekstra, A. Muzzin, **C. Sifón**, et al. (17 co-authors), **"The Abundance of Ultra-Diffuse Galaxies from Groups to Clusters: UDGs are Relatively More Common in More Massive Haloes"**, 2017, A&A, 607, A79 [arXiv]

8. E. van Uitert, M. Cacciato, H. Hoekstra, M. Brouwer, **C. Sifón**, et al. (29 co-authors), **"The Stellar-to-Halo Mass Relation of GAMA Galaxies from 100 Square Degrees of KiDS Weak Lensing Data"**, 2016, MNRAS, 459, 3251 [arXiv]

7. D. Kirk, M. L. Brown, H. Hoekstra, B. Joachimi, T. D. Kitching, R. Mandelbaum, **C. Sifón**, M. Cacciato, A. Choi, A. Kiessling, A. Leonard, A. Rassat, B. Malte Schäfer, **"Galaxy Alignments: Observations and Impact on Cosmology"**, 2015, Space Sci. Rev., 193, 139 [arXiv]

6. A. Kiessling, M. Cacciato, B. Joachimi, D. Kirk, T. D. Kitching, A. Leonard, R. Mandelbaum, B. Malte Schäfer, **C. Sifón**, M. L. Brown, A. Rassat, **"Galaxy Alignments: Theory, Modelling & Simulations"**, 2015, Space Sci. Rev., 193, 67 [arXiv]

5. B. Joachimi, M. Cacciato, T. D. Kitching, A. Leonard, R. Mandelbaum, B. Malte Schäfer, **C. Sifón**, H. Hoekstra, A. Kiessling, D. Kirk, A. Rassat, **"Galaxy Alignments: an Overview"**, 2015, Space Sci. Rev., 193, 1 [arXiv]

4. R. F. J. van der Burg, H. Hoekstra, A. Muzzin, **C. Sifón**, M. L. Balogh, S. McGee, **"Evidence for the Inside-Out Growth of the Stellar Mass Distribution in Galaxy Clusters since $z \sim 1$"**, 2015, A&A, 577, 19 [arXiv]

3. M. Hilton, M. Hasselfield, **C. Sifón**, et al. (26 co-authors), **"The Atacama Cosmology Telescope: The Stellar Content of Galaxy Clusters Selected Using the Sunyaev-Zel'dovich Effect"**, 2013, MNRAS, 435, 3469 [arXiv]

2. F. Menanteau, **C. Sifón**, et al. (26 co-authors), **"The Atacama Cosmology Telescope: Physical Properties of Sunyaev-Zel'dovich Effect Clusters on the Celestial Equator"**, 2013, ApJ, 765, 67 [arXiv]

1. F. Menanteau, J. P. Hughes, **C. Sifón**, et al. (27 co-authors), **"The Atacama Cosmology Telescope: ACT-CL J0102–4915 "El Gordo," a Massive Merging Cluster at Redshift 0.87"**, 2012, ApJ, 748, 7 [arXiv]

Contributing Author Papers (All including C. Sifón)

58. S. Amodeo et al. (55 co-authors), **"The Atacama Cosmology Telescope: Modelling the Gas Thermodynamics in BOSS CMASS Galaxies from Kinematic and Thermal Sunyaev-Zel'dovich Measurements"**, 2020, arXiv:2009.05558, submitted to Phys. Rev. D

57. E. Schaan et al. (61 co-authors), **"The Atacama Cosmology Telescope: Combined Kinematic and Thermal Sunyaev-Zel'dovich Measurements from BOSS CMASS and LOWZ Halos"**, 2020, arXiv:2009.05557, submitted to Phys. Rev. D

56. S. Adhikari et al. (113 co-authors), **"Probing Galaxy Evolution in Massive Clusters using ACT and DES: Splashback as a Cosmic Clock"**, 2020, arXiv:2008.11663, submitted to ApJ

55. S. Naess et al. (56 co-authors), **"The Atacama Cosmology Telescope: Arcminute-Resolution Maps of 18,000 Square Degrees of the Microwave Sky from ACT 2008-2018 Data Combined with Planck"**, 2020, arXiv:2007.07290, submitted to JCAP

54. S. K. Choi et al. (120 co-authors), **"The Atacama Cosmology Telescope: a Measurement of the Cosmic Microwave Background Power Spectra at 98 and 150 Ghz"**, 2020, arXiv:2007.07289, submitted to JCAP

53. S. Aiola et al. (128 co-authors), **"The Atacama Cosmology Telescope: DR4 Maps and Cosmological Parameters"**, 2020, arXiv:2007.07288, submitted to JCAP

52. O. Darwish et al. (45 co-authors), **"The Atacama Cosmology Telescope: a CMB Lensing Mass Map over 2100 Square Degrees of Sky and its Cross-Correlation with BOSS-CMASS Galaxies"**, 2020, arXiv:2004.01139 submitted to Phys. Rev. D

51. B. Fuzia et al. (22 co-authors), **"The Atacama Cosmology Telescope: SZ-Based Masses and Dust Emission from IR-Selected Cluster Candidates in the SHELA Survey"**, 2020, arXiv:2001.09587, submitted to MNRAS

50. E. N. Taylor et al. (17 co-authors), **"GAMA+KiDS: Empirical Correlations between Halo Mass and other Galaxy Properties near the Knee of the Stellar-to-Halo Mass Relation"**, 2020, arXiv:2006.10040, accepted for publication in MNRAS

49. Z. Li et al. (27 co-authors), **"The Cross Correlation of the ABS and ACT Maps"**, 2020, JCAP, 09, 010 [arXiv]

48. Y. Rong et al. (13 co-authors), **"Intrinsic Morphology Evolution of Ultra-diffuse Galaxies"**, 2019, ApJ, 899, 78 [arXiv]

47. L. Linke et al. (12 co-authors), **"KiDS+VIKING+GAMA: Testing Semi-Analytic Models of Galaxy Evolution with Galaxy-Galaxy-Galaxy-Lensing"**, 2020. A&A, 640, 59 [arXiv]

46. M. Madhavacheril et al. (49 co-authors), **"The Atacama Cosmology Telescope: Component-Separated Maps of CMB Temperature and the Thermal Sunyaev-Zel'dovich Effect"**, 2020, Phys. Rev. D, 102, 023534 [arXiv]

45. T. Namikawa et al. (55 co-authors), **"The Atacama Cosmology Telescope: Constraints on Cosmic Birefringence"**, 2020, Phys. Rev. D, 101, 083527 [arXiv]

44. S. Huang et al. (12 co-authors), **"Weak Lensing Reveals a Tight Connection Between Dark Matter Halo Mass and the Distribution of Stellar Mass in Massive Galaxies"**, 2020, MNRAS, 492, 3685 [arXiv]

43. Q. Xia et al. (13 co-authors), **"A Gravitational Lensing Detection of Filamentary Structures Connecting Luminous Red Galaxies"**, 2020, A&A, 633, 89 [arXiv]

42. H. Hildebrandt et al. (28 co-authors), **"KiDS+VIKING-450: Cosmic Shear Tomography with Optical+infrared Data"**, 2020, A&A, 633, 69 [arXiv]

41. J. S. Speagle et al. (12 co-authors), **"Galaxy-Galaxy Lensing in HSC: Validation Tests and theImpact of Heterogeneous Spectroscopic Training Sets"**, 2019, MNRAS, 490, 5658 [arXiv]

40. K. R. Hall et al. (25 co-authors), **"Quantifying the Thermal Sunyaev-Zel'dovich Effect and Excess Millimeter Emission in Quasar Environments"**, 2019, MNRAS, 490, 2315 [arXiv]

39. A. K. Wright et al. (22 co-authors), **"KiDS+VIKING-450: A New Combined Optical & Near-IR Dataset for Cosmology and Astrophysics"**, 2019, A&A, 632, A34 [arXiv]

38. C. Hikage et al. (30 co-authors), **"Cosmology from Cosmic Shear Power Spectra with Subaru Hyper Suprime-Cam First-Year Data"**, 2019, PASJ, 71, 43 [arXiv]

37. H. Miyatake et al. (58 co-authors), **"Weak-Lensing Mass Calibration of ACTPol Sunyaev-Zel'dovich Clusters with the Hyper Suprime-Cam Survey"**, 2019, ApJ, 875, 63 [arXiv]

36. K. Knowles et al. (14 co-authors), **"GMRT 610 MHz Observations of Galaxy Clusters in the ACT Equatorial Sample"**, 2019, MNRAS, 486, 1332 [arXiv]

35. M. Brouwer et al. (18 co-authors), **"Studying Galaxy Troughs and Ridges using Weak Gravitational Lensing with the Kilo-Degree Survey"**, 2018, MNRAS, 481, 5189 [arXiv]

34. R. Wojtak et al. (17 co-authors), **"Galaxy Cluster Mass Reconstruction Project - IV. Understanding the Effects of Imperfect Membership on Cluster Mass Estimation"**, 2018, MNRAS, 481, 324 [arXiv]

33. A. Jakobs et al. (20 co-authors), **"Multi-Wavelength Scaling Relations in Galaxy Groups: a Detailed Comparison of GAMA and KiDS Observations to BAHAMAS Simulations"**, 2018, MNRAS, 480, 3338 [arXiv]

32. A. Dvornik et al. (14 co-authors), **"Unveiling Galaxy Bias via the Halo Model, KiDS and GAMA"**, 2018, MNRAS, 479, 1240 [arXiv]

31. J. P. Greco et al. (13 co-authors), **"Illuminating Low-Surface-Brightness Galaxies with the Hyper Suprime-Cam Survey"**, 2018, ApJ, 857, 104 [arXiv]

30. J. F. Wu, P. Aguirre, A. J. Baker, M. J. Devlin, M. Hilton, J. P. Hughes, L. Infante, R. R. Lindner, **C. Sifón**, **"Herschel and ALMA Observations of Massive SZE-selected Clusters"**, 2018, ApJ, 853, 195 [arXiv]

29. E. Medezinski et al. (16 co-authors), **"Source Selection for Cluster Weak Lensing Measurements in the Hyper Suprime-Cam Survey"**, 2018, PASJ, 70, 30 [arXiv]

28. E. Medezinski et al. (12 co-authors), **"Planck Sunyaev-Zel'dovich Cluster Mass Calibration using Hyper Suprime-Cam Weak Lensing"**, 2018, PASJ, 70, 28 [arXiv]

27. R. Mandelbaum et al. (27 co-authors), **"The First-Year Shear Catalog of the Subaru Hyper Suprime-Cam SSP Survey"**, 2018, PASJ, 70, 25 [arXiv]

26. L. Old et al. (18 co-authors), **"Galaxy Cluster Mass Reconstruction Project: III. The Impact of Dynamical Substructure on Cluster Mass Estimates"**, 2018, MNRAS, 475, 853 [arXiv]

25. M. Velliscig et al. (17 co-authors), **"Galaxy-Galaxy Lensing in EAGLE: Comparison with Data from 180 Square Degrees of the KiDS and GAMA Surveys"**, 2017, MNRAS, 471, 2856 [arXiv]

24. A. Dvornik et al. (22 co-authors), **"A KiDS Weak Lensing Analysis of Assembly Bias in GAMA Galaxy Groups"**, 2017, MNRAS, 468, 3251 [arXiv]

23. M. M. Brouwer et al. (22 co-authors), **"First Test of Verlinde's Theory of Emergent Gravity Using Weak Gravitational Lensing Measurements"**, 2017, MNRAS, 466, 2547 [arXiv]

22. M. M. Brouwer et al. (36 co-authors), **"Dependence of GAMA Galaxy Halo Masses on the Cosmic Web Environment from 100 Square Degrees of KiDS Weak Lensing Data"**, 2016, MNRAS, 462, 4451 [arXiv]

21. N. Battaglia et al. (39 co-authors), **"Weak-Lensing Mass Calibration of the Atacama Cosmology Telescope Equatorial Sunyaev-Zel'dovich Cluster Sample with the Canada-France-Hawaii Telescope Stripe 82 Survey"**, 2016, JCAP, 08, 013 [arXiv]

20. S. Bellstedt et al. (16 co-authors), **"The Evolution in the Stellar Mass of Brightest Cluster Galaxies over the Past 10 Billion Years"**, 2016, MNRAS, 460, 2862 [arXiv]

19. K. Knowles et al. (21 co-authors), **"A Giant Radio Halo in a Low-Mass SZ-Selected Galaxy Cluster: ACT-CL J0256.5+0006"**, 2016, MNRAS, 459, 4240 [arXiv]

18. D. Crichton et al. (22 co-authors), **"Evidence for the Thermal Sunyaev-Zel'dovich Effect Associated with Quasar Feedback"**, 2016, MNRAS, 458, 1478 [arXiv]

17. J. T. A. de Jong et al. (49 co-authors), **"The First and Second Data Releases of the Kilo Degree Survey"**, 2015, A&A, 582, 62 [arXiv]

16. K. Kuijken et al. (35 co-authors), **"Gravitational Lensing Analysis of the Kilo Degree Survey"**, 2015, MNRAS, 454, 3500 [arXiv]

15. K. Y. Ng, W. A. Dawson, D. Wittman, M. J. Jee, J. P. Hughes, F. Menanteau, **C. Sifón**, **"The Return of the Merging Galaxy Subclusters of El Gordo?"**, 2015, MNRAS, 453, 1531 [arXiv]

14. M. Viola et al. (27 co-authors), **"Dark Matter Halo Properties of GAMA Galaxy Groups from 100 Square Degrees of KiDS Weak Lensing Data"**, 2015, MNRAS, 452, 3529 [arXiv]

13. R. R. Lindner et al. (25 co-authors), **"The Atacama Cosmology Telescope: the LABOCA/ACT Survey of Clusters at All Redshifts"**, 2015, ApJ, 803, 79 [arXiv]

12. B. Kirk et al. (23 co-authors), **"SALT Spectroscopic Observations of Galaxy Clusters Detected by ACT and a Type II Quasar Hosted by a Brightest Cluster Galaxy"**, 2015, MNRAS, 449, 4010 [arXiv]

11. L. Old et al. (24 co-authors), **"Galaxy Cluster Mass Reconstruction Project: II. Results for Galaxy-Based Techniques with Improved Models"**, 2015, MNRAS, 449, 1897 [arXiv]

10. M. B. Gralla et al. (41 co-authors), **"A Measurement of the Millimeter Emission and the Sunyaev-Zel'dovich Effect Associated with Low-Frequency Radio Sources"**, 2014, MNRAS, 445, 460 [arXiv]

9. L. Old et al. (21 co-authors), **"Galaxy Cluster Mass Reconstruction Project: I. Methods and First Results on Galaxy-Based Techniques"**, 2014, MNRAS, 441, 1513 [arXiv]

8. M. J. Jee, J. P. Hughes, F. Menanteau, **C. Sifón**, L. F. Barrientos, L. Infante, R. Mandelbaum, K. Y. Ng, **"Weighing "El Gordo" with a Precision Scale: Hubble Space Telescope Weak-Lensing Analysis of the Galaxy Cluster ACT-CL J0102-4915 at $z = 0.87$"**, 2014, ApJ, 785, 20 [arXiv]

7. M. Hasselfield et al. (44 co-authors), **"The Atacama Cosmology Telescope: Sunyaev-Zel'dovich Selected Galaxy Clusters at 148 GHz from Three Seasons of Data"**, 2013, JCAP, 07, 008 [arXiv]

6. E. Calabrese et al. (34 co-authors), **"Cosmological Parameters from Pre-Planck Cosmic Microwave Background Measurements"**, 2013, Phys. Rev. D, 87, 103012 [arXiv]

5. N. Sehgal et al. (36 co-authors), **"The Atacama Cosmology Telescope: Relation between Galaxy Cluster Optical Richness and Sunyaev-Zel'dovich Effect"**, 2013, ApJ, 767, 38 [arXiv]

4. H. Miyatake et al. (28 co-authors), **"Subaru Weak-Lensing Measurement of a $z = 0.81$ Cluster Discovered by the Atacama Cosmology Telescope Survey"**, 2013, MNRAS, 429, 3627 [arXiv]

3. B. D. Sherwin et al. (31 co-authors), **"The Atacama Cosmology Telescope: Cross-correlation of CMB Lensing and Quasars"**, 2012, Phys. Rev. D, 86, 083006 [arXiv]

2. N. Hand et al. (58 co-authors), **"Evidence of Galaxy Cluster Motions with the Kinematic Sunyaev-Zel'dovich Effect"**, 2012, Phys. Rev. Letters, 109, 041101 [arXiv]

1. E. D. Reese et al. (44 co-authors), **"The Atacama Cosmology Telescope: High-Resolution Sunyaev-Zel'dovich Array Observations of ACT SZE-selected Clusters from the Equatorial Strip"**, 2012, ApJ, 751, 12 [arXiv]