Publication list

I have co-authored 93 scientific articles intended for peer-reviewed publication, including 7 first-author papers. They have been cited more than 4,000 times and have an h-index of 35, with more than 300 citations on my first-author papers. The full list of publications can be accessed at the SAO/NASA Astrophysics Data System. 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]
- 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

- 15. N. C. Robertson, C. Sifón, et al. (23 co-authors), "ACT-DR5 Sunyaev-Zel'dovich Clusters: Weak Lensing Mass Calibration with KiDS", 2023, arXiv:2304.10219,
- 14. M. Hilton, C. Sifón, et al. (133 co-authors), "The Atacama Cosmology Telescope: a Catalog of >4000 Sunyaev-Zel'dovich Galaxy Clusters", 2021, ApJS, 253, 3 [arXiv]
- 13. M. S. Madhavacheril, C. Sifón, et al. (61 co-authors), "The Atacama Cosmology Telescope: Weighing Distant Clusters with the Most Ancient Light", 2020, ApJL, 903, 13 [arXiv]
- 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]
- 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]

- 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]
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 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)

- 71. M. Aguena et al. (24 co-authors), "CLMM: a Lsst-Desc Cluster Weak Lensing Mass Modeling Library for Cosmology", 2021, MNRAS, 508, 6092 [arXiv]
- 70. S. R. Dicker et al. (29 co-authors), "Observations of Compact Sources in Galaxy Clusters Using Mustang2", 2021, MNRAS, 508, 2600 [arXiv]
- 69. S. Naess et al. (40 co-authors), "The Atacama Cosmology Telescope: a Search for Planet 9", 2021, ApJ, 923, 224 [arXiv]
- 68. J. Kim, M. J. Jee, J. P. Hughes, M. Yoon, K. HyeongHan, F. Menanteau, C. Sifón, L. Hovey, P. Arunachalam "Head-to-toe Measurement of El Gordo: Improved Analysis of the Galaxy Cluster ACT-Cl J0102-4915 with New Wide-Field Hubble Space Telescope Imaging Data", 2021, ApJ, 923, 101 [arXiv]
- 67. S. Adhikari et al. (113 co-authors), "Probing Galaxy Evolution in Massive Clusters using ACT and DES: Splashback as a Cosmic Clock", 2021, ApJ, 923, 37 [arXiv]
- 66. Y. Li et al. (32 co-authors), "Constraining Cosmic Microwave Background Temperature Evolution with Sunyaev-Zel'dovich Galaxy Clusters from the Atacama Cosmology Telescope", 2021, ApJ, 922, 136 [arXiv]
- 65. T. Shin et al. (139 co-authors), "The Mass and Galaxy Distribution around SZ-Selected Clusters", 2021, MNRAS, 507, 5758 [arXiv]
- 64. Y. Guan et al. (33 co-authors), "The Atacama Cosmology Telescope: Microwave Intensity and Polarization Maps of the Galactic Center", 2021, pj, 920, 6 [arXiv]
- 63. J. Orlowski-scherer et al. (34 co-authors), "Atacama Cosmology Telescope Measurements of a Large Sample of Candidates from the Massive and Distant Clusters of Wise Survey. Sunyaev-Zeldovich Effect Confirmation of Madcows Candidates Using ACT", 2021, A&A, 653, A135 [arXiv]
- 62. E. M. Vavagiakis et al. (52 co-authors), "The Atacama Cosmology Telescope: Probing the Baryon Content of SDSS DR15 Galaxies with the Thermal and Kinematic Sunyaev-Zel'dovich Effects", 2021, Phys. Rev. D, 104, 043503 [arXiv]
- 61. V. Calafut et al. (53 co-authors), "The Atacama Cosmology Telescope: Detection of the Pairwise Kinematic Sunyaev-Zel'dovich Effect with SDSS DR15 Galaxies", 2021, Phys. Rev. D, 104, 043502 2101.08374

- 60. M. Mallaby-Kay et al. (69 co-authors), "The Atacama Cosmology Telescope: Summary of DR4 and DR5 Data Products and Data Access", 2020, ApJS, 225, 11, [arXiv]
- 59. N. C. Robertson et al. (46 co-authors), "Strong Detection of the CMB Lensing × Galaxy Weak Lensing Cross-Correlation from ACT-DR4, Planck Legacy and KiDS-1000", 2021, A&A, 649, 146, [arXiv]
- 58. K. Knowles et al. (28 co-authors), "MERGHERS Pilot: MeerKAT Discovery of Diffuse Emission in Nine Massive Sunyaev-Zel'dovich-Selected Galaxy Clusters from ACT", 2021, MNRAS, 504, 1749 [arXiv]
- 57. 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", 2021, Phys. Rev. D, 103, 063514 [arXiv]
- 56. 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", 2021, Phys. Rev. D, 103, 063513 [arXiv]
- 55. 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", 2021, MNRAS, 502, 4026 [arXiv]
- 54. 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", 2021, MNRAS, 500, 2250 [arXiv]
- 53. S. Aiola et al. (140 co-authors), "The Atacama Cosmology Telescope: DR4 Maps and Cosmological Parameters", 2020, JCAP, 12, 047 [arXiv]
- 52. S. Naess et al. (61 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, JCAP, 12, 046 [arXiv]
- 51. S. K. Choi et al. (138 co-authors), "The Atacama Cosmology Telescope: a Measurement of the Cosmic Microwave Background Power Spectra at 98 and 150 GHz", 2020, JCAP, 12, 045 [arXiv]
- 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, MNRAS, 499, 2896 [arXiv]
- 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-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]
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- 41. J. S. Speagle et al. (12 co-authors), "Galaxy-Galaxy Lensing in HSC: Validation Tests and the Impact 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]
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- 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]
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- 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]
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- 6. E. Calabrese et al. (34 co-authors), "Cosmological Parameters from Pre-Planck Cosmic Microwave Background Measurements", 2013, Phys. Rev. D, 87, 103012 [arXiv]
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- 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]