

Matthew B. Bayliss Publications

90 in refereed journals — 12 First/Corresponding Author

3480+ citations, h-index = 32; i10-index = 62

1 Selected Principal Publications:

20. Rigby, J. R.; **Bayliss, M. B.**; Chisholm, J.; Bordoloi, R.; Sharon, K.; Gladders, M. D.; Johnson, T.; Paterno-Mahler, R.; Wuyts, E.; Dahle, H.; Acharyya, A., “The Magellan Evolution of Galaxies Spectroscopic and Ultraviolet Reference Atlas (MEGaSaURA) II: Stacked Spectra”, *The Astrophysical Journal* Volume 853, pp. 87–104 (2018)
19. Rigby, J. R.; **Bayliss, M. B.**; Sharon, K.; Gladders, M. D.; Chisholm, J.; Dahle, H.; Johnson, T.; Paterno-Mahler, R.; Wuyts, E.; Kelson, D. D., “The Magellan Evolution of Galaxies Spectroscopic and Ultraviolet Reference Atlas (MEGaSaURA) I: The Sample and the Spectra”, *The Astronomical Journal* Volume 155, pp. 104–119 (2018)
18. **Bayliss, Matthew B.**; Sharon, Keren; Acharyya, Ayan; Gladders, Michael D.; Rigby, Jane R.; Bian, Fuyan; Bordoloi, Rongmon; Runnoe, Jessie; Dahle, Hakon; Kewley, Lisa; Florian, Michael; Johnson, Traci; Paterno-Mahler, Rachel, “Spatially Resolved Patchy Ly α Emission within the Central Kiloparsec of a Strongly Lensed Quasar Host Galaxy at $z = 2.8$ ”, *The Astrophysical Journal Letters*, Volume 845, pp. 14–20, (2017)
17. **Bayliss, Matthew B.**; Zengo, Kyle; Ruel, Jonathan; Benson, Bradford A.; Bleem, Lindsey E.; Bocquet, Sebastian; Bulbul, Esra; Brodwin, Mark; Capasso, Raffaella; Chiu, I-non; McDonald, Michael; Rapetti, David; Saro, Alex; Stalder, Brian; Stark, Antony A.; Strazzullo, Veronica; Stubbs, Christopher W.; Zenteno, Alfredo, “Velocity Segregation and Systematic Biases In Velocity Dispersion Estimates With the SPT-GMOS Spectroscopic Survey”, *The Astrophysical Journal*, Volume 837, pp. 88–104 (2017)
16. **Bayliss, Matthew B.**; Ruel, J.; Stubbs, C. W.; et al. “SPT-GMOS: A Gemini/GMOS-South Spectroscopic Survey of Galaxy Clusters in the SPT-SZ Survey”, Accepted to *The Astrophysical Journal Supplements* Volume 227, pp. 3–26 (2016)
15. Sharon, Keren; **Bayliss, Matthew B.**; Dahle, Hakon; Florian, Michael K.; Gladders, Michael D.; Johnson, Traci L.; Paterno-Mahler, Rachel; Rigby, Jane R.; Whitaker, Katherine E.; Wuyts, Eva, “Lens Model and Time Delay Predictions for the Sextuply Lensed Quasar SDSS J2222+2745”, *The Astrophysical Journal*, Volume 835, pp. 5–19 (2017)
14. Rigby, Jane R.; **Bayliss, Matthew B.**; Gladders, Michael D.; Sharon, Keren; Wuyts, Eva; Dahle, Hakon; Johnson, Traci; Pena-Guerrero, Maria; “C III] Emission in Star-Forming Galaxies Near and Far”, Accepted to *The Astrophysical Journal Letters* Volume 814, pp. 6–11 (2015)
13. **Bayliss, Matthew B.**; Sharon, Keren; Johnson, T., “Quantifying the Impact of Cosmological Parameter Uncertainties on Strong Lensing Models With an Eye Toward the Frontier Fields”, *The Astrophysical Journal Letters*, Volume 802, pp. 9–14 (2015)
12. Johnson, Traci L.; Sharon, Keren; **Bayliss, Matthew B.**; Gladders, Michael D.; Coe, Dan; Ebeling, Harald, “Lens Models and Magnification Maps of the Six Hubble Frontier Fields Clusters”, *The Astrophysical Journal*, Volume 797, pp. 48–78 (2014)
11. **Bayliss, Matthew B.**; Ashby, M. L. N.; Ruel, J.; Brodwin, M., et al. “SPT-CLJ2040-4451: An SZ-Selected Galaxy Cluster at $z = 1.478$ With Significant Ongoing Star Formation”, *The Astrophysical Journal*, Volume 794, pp. 12–25 (2014)

10. ¹Ruel, J.; Bazin, G. **Bayliss, M. B.**; Brodwin, M.; Foley, R. J. ; Stalder, B. et al. “Optical Spectroscopy and Velocity Dispersions of Galaxy Clusters from the SPT-SZ Survey”, *The Astrophysical Journal*, Volume 792, pp. 45–61 (2014)
9. **Bayliss, Matthew B.**; Rigby, J. R.; Wuyts, E., Sharon, K.; Florian, M.; Gladders, M. D.; Johnson, T., “The Physical Conditions, Metallicity and Metal Abundance Ratios In a Highly Magnified Galaxy at $z = 3.6252$ ”, *The Astrophysical Journal* Volume 790, pp. 144–163 (2014)
8. **Bayliss, Matthew B.**; Johnson, T.; Gladders, M. D.; Sharon, K.; Oguri, M., “Line of Sight Structure Toward Strong Lensing Galaxy Clusters”, *The Astrophysical Journal*, Volume 784, pp. 41–51 (2014)
7. ²Blanchard, Peter K.; **Bayliss, Matthew B.**; McDonald, Michael; Dahle, Håkon; Gladders, Michael D.; Sharon, Keren; Mushotzky, Richard, “Searching for Cooling Signatures in Strong Lensing Galaxy Clusters: Evidence Against Baryons Shaping the Matter Distribution in Cluster Cores”, *The Astrophysical Journal*, Volume 772, pp. 24–31 (2013)
6. McDonald, M.; **Bayliss, Matthew B.**; Benson, B. A.; Foley, R. J.; Ruel, J.; Sullivan, P.; Veilleux, S., et al. “A Massive, Cooling-Flow-Induced Starburst in the Core of a Highly Luminous Galaxy Cluster”, *Nature*, Volume 488, Issue 7411, pp. 349–352 (2012)
5. **Bayliss, Matthew B.**, “Broadband Photometry of 105 Giant Arcs: Redshift Constraints and Implications for Giant Arc Statistics”, *The Astrophysical Journal*, Volume 744, pp. 156–169 (2012)
4. Oguri, Masamune; **Bayliss, Matthew B.**; Dahle, Håkon; Sharon, Keren; Gladders, Michael D.; Natarajan, Priyamvada; Hennawi, Joseph F.; Koester, Benjamin P., “Combined Strong and Weak Lensing Analysis of 28 Clusters From the Sloan Giant Arcs Survey”, *Monthly Notices of the Royal Astronomical Society*, Volume 420 pp. 3213–3239 (2012)
3. **Bayliss, Matthew B.**; Hennawi, Joseph F.; Gladders, Michael D.; Koester, Benjamin P.; Sharon, Keren; Dahle, Håkon; Oguri, Masamune, “Gemini/GMOS Spectroscopy of 26 Strong Lensing Selected Galaxy Cluster Cores”, *The Astrophysical Journal Supplements*, Volume 193, pp. 8–33 (2011)
2. **Bayliss, Matthew B.**; Gladders, Michael D.; Oguri, Masamune; Hennawi, Joseph F.; Sharon, Keren; Koester, Benjamin P.; Dahle, Håkon, “The Redshift Distribution of Giant Arcs In the Sloan Giant Arcs Survey”, *The Astrophysical Journal Letters* Volume 727, pp. L26–L30 (2011)
1. **Bayliss, Matthew B.**; Wuyts, Eva; Sharon, Keren; Gladders, Michael D.; Hennawi, Joseph F.; Koester, Benjamin P.; Dahle, Håkon, “Two Lensed Lyman-alpha Emitting Galaxies at $z \sim 5$ ”, *The Astrophysical Journal*, Volume 720, pp. 1559–1568 (2010)

2 Press Articles & Presentations:

3. **Matthew B. Bayliss**, Christopher Stubbs & Jonathan Ruel. “An NOAO Survey of South Pole Telescope SZ-Selected Galaxy Clusters”, NOAO Newsletter 108 Science Highlights, Sept 2013
2. **Matthew B. Bayliss**, “Gravitational Lensing: Nature’s Telescopes”, Harvard-Smithsonian Center for Astrophysics *Observatory Nights* Public Lecture Series, April 2013, published online at <http://www.youtube.com/watch?v=bhuOavui7f0&feature=share&list=PL955C113AE0C81B62>
1. **Matthew B. Bayliss**, “Gemini/GMOS-Spectroscopy of a Large Sample of Strong Lensing Selected Galaxy Clusters”, NOAO Newsletter 104 Science Highlights, Sept 2011

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²Undergraduate Advisee Paper

3 All Refereed Journal Articles:

90. McDonald, M.; Allen, S. W.; Hlavacek-Larrondo, J.; Mantz, A. B.; **Bayliss, M.**; Benson, B. A.; Brodwin, M.; Bulbul, E.; Canning, R. E. A.; Chiu, I.; Forman, W. R.; Garmire, G. P.; Gupta, N.; Khullar, G.; Mohr, J. J.; Reichardt, C. L.; Schrabback, T., “A Detailed Study of the Most Relaxed SPT-Selected Galaxy Clusters: Cool Core and Central Galaxy Properties”, Submitted to *The Astronomical Journal*, ArXiv: e-print 1809.09104 (2018)
89. Chiu, I.; Mohr, J. J.; McDonald, M.; Bocquet, S.; Desai, S.; Klein, M.; Israel, H.; Ashby, M. L. N.; Stanford, A.; Benson, B. A.; Brodwin, M.; Abbott, T. M. C.; Abdalla, F. B.; Allam, S.; Annis, J.; **Bayliss, M.**; Benoit-Lvy, A.; Bertin, E.; Bleem, L.; Brooks, D.; Buckley-Geer, E.; Bulbul, E.; Capasso, R.; Carlstrom, J. E.; Carnero Rosell, A.; Carretero, J.; Castander, F. J.; Cunha, C. E.; D’Andrea, C. B.; da Costa, L. N.; Davis, C.; Diehl, H. T.; Dietrich, J. P.; Doel, P.; Drlica-Wagner, A.; Eifler, T. F.; Evrard, A. E.; Flaugher, B.; Garca-Bellido, J.; Garmire, G.; Gaztanaga, E.; Gerdes, D. W.; Gonzalez, A.; Gruen, D.; Gruendl, R. A.; Gschwend, J.; Gupta, N.; Gutierrez, G.; Hlavacek-L., J.; Honscheid, K.; James, D. J.; Jeltama, T.; Kraft, R.; Krause, E.; Kuehn, K.; Kuhlmann, S.; Kuropatkin, N.; Lahav, O.; Lima, M.; Maia, M. A. G.; Marshall, J. L.; Melchior, P.; Menanteau, F.; Miquel, R.; Murray, S.; Nord, B.; Ogando, R. L. C.; Plazas, A. A.; Rapetti, D.; Reichardt, C. L.; Romer, A. K.; Roodman, A.; Sanchez, E.; Saro, A.; Scarpine, V.; Schindler, R.; Schubnell, M.; Sharon, K.; Smith, M.; Smith, R. C.; Soares-Santos, M.; Sobreira, F.; Stalder, B.; Stern, C.; Strazzullo, V.; Suchyta, E.; Swanson, M. E. C.; Tarle, G.; Vikram, V.; Walker, A. R.; Weller, J.; Zhang, Y., “Baryon Content in a Sample of 91 Galaxy Clusters Selected by the South Pole Telescope at $0.2 < z < 1.25$ ”, submitted to *Monthly Notices of the Royal Astronomical Society*, Volume 478, pp. 3072-3099 (2018)
88. Chisholm, J.; Gazagnes, S.; Schaerer, D.; Verhamme, A.; Rigby, J. R.; **Bayliss, M.**; Sharon, K.; Gladders, M.; Dahle, H., “Accurately predicting the escape fraction of ionizing photons using rest-frame ultraviolet absorption lines”, *Astronomy & Astrophysics*, Volume 616, A30, 12 pp. (2018)
87. Gazagnes, S.; Chisholm, J.; Schaerer, D.; Verhamme, A.; Rigby, J. R.; **Bayliss, M.**, “Neutral gas properties of Lyman continuum emitting galaxies: Column densities and covering fractions from UV absorption lines”, *Astronomy & Astrophysics*, Volume 616, A29, 22 pp. (2018)
86. Strazzullo, V.; Pannella, M.; Mohr, J. J.; Saro, A.; Ashby, M. L. N.; **Bayliss, M. B.**; Bocquet, S.; Bulbul, E.; Khullar, G.; Mantz, A. B.; Stanford, S. A.; Benson, B. A.; Bleem, L. E.; Brodwin, M.; Canning, R. E. A.; Capasso, R.; Chiu, I.; Gonzalez, A. H.; Gupta, N.; Hlavacek-Larrondo, J.; Klein, M.; McDonald, M.; Noordeh, E.; Rapetti, D.; Reichardt, C.; Schrabback, T.; Sharon, K.; Stalder, B., “Galaxy populations in the most distant SPT-SZ clusters - I. Environmental quenching in massive clusters at $1.4 < z < 1.7$ ”, Submitted to *Astronomy & Astrophysics*, ArXiv: e-print 1807.09768 (2018)
85. Bulbul, Esra; Chiu, I-Non; Mohr, Joseph J.; McDonald, Michael; Benson, Bradford; Bautz, Mark W.; **Bayliss, Matthew**; Bleem, Lindsey; Brodwin, Mark; Bocquet, Sebastian; Capasso, Raffaella; Dietrich, Joerg P.; Forman, Bill; Hlavacek-Larrondo, Julie; Holzzapfel, William L.; Khullar, Gourav; Klein, Matthias; Kraft, Ralph; Miller, Eric D.; Reichardt, Christian; Saro, Alex; Sharon, Keren; Stalder, Brian; Schrabback, Tim; Stanford, Adam, “X-ray Properties of SPT Selected Galaxy Clusters at $0.2 < z < 1.5$ Observed with XMM-Newton”, Submitted to *The Astronomical Journal*, ArXiv: e-print 1807.02556 (2018)
84. Khullar, G.; Bleem, L. E.; **Bayliss, M. B.**; Gladders, M. D.; Benson, B. A.; McDonald, M.; Allen, S. W.; Applegate, D. E.; Ashby, M. L. N.; Bocquet, S.; Brodwin, M.; Bulbul, E.; Canning, R. E. A.; Capasso, R.; Chiu, I.; Crawford, T. M.; de Haan, T.; Dietrich, J. P.; Gonzalez, A. H.; Hlavacek-Larrondo, J.; Hoekstra, H.; Holzzapfel, W. L.; von der Linden, A.; Mantz, A. B.; Patil, S.; Reichardt, C. L.; Saro, A.; Sharon, K.; Stalder, B.; Stanford, S. A.; Stark, A. A.; Strazzullo, V., “Spectroscopic Confirmation of Five Galaxy Clusters at $z > 1.25$ in the 2500 sq. deg. SPT-SZ Survey”, Submitted to *The Astronomical Journal*, ArXiv: e-print 1806.01962 (2018)

83. Rigby, J. R.; **Bayliss, M. B.**; Sharon, K.; Gladders, M. D.; Chisholm, J.; Dahle, H.; Johnson, T.; Paterno-Mahler, R.; Wuyts, E.; Kelson, D. D., “The Magellan Evolution of Galaxies Spectroscopic and Ultraviolet Reference Atlas (MEGaSaURA) I: The Sample and the Spectra”, *The Astronomical Journal*, Volume 155, pp. 104–119 (2018)
82. Sebastian Lopez, Nicolas Tejos, Cedric Ledoux, L. Felipe Barrientos, Keren Sharon, Jane R. Rigby, Michael D. Gladders, **Matthew B. Bayliss**, Ismael Pessa, “Gravitational-arc Tomography Maps the Gaseous Halo of a Distant Galaxy”, *Nature*, Volume 554, pp. 493-496 (2018)
81. Schrabback, T.; Applegate, D.; Dietrich, J. P.; Hoekstra, H.; Bocquet, S.; Gonzalez, A. H.; von der Linden, A.; McDonald, M.; Morrison, C. B.; Raihan, S. F.; Allen, S. W.; **Bayliss, M.**; Benson, B. A.; Bleem, L. E.; Chiu, I.; Desai, S.; Foley, R. J.; de Haan, T.; High, F. W.; Hilbert, S.; Mantz, A. B.; Massey, R.; Mohr, J.; Reichardt, C. L.; Saro, A.; Simon, P.; Stern, C.; Stubbs, C. W.; Zenteno, A., “Cluster mass calibration at high redshift: HST weak lensing analysis of 13 distant galaxy clusters from the South Pole Telescope Sunyaev-Zel’dovich Survey”, *Monthly Notices of the Royal Astronomical Society*, Volume 474, pp. 2635-2678 (2018)
80. Chisholm, J.; Bordoloi, R.; Rigby, J. R.; **Bayliss, M.**, “Feeding the fire: Tracing the mass-loading of 10^7 K galactic outflows with O VI absorption”, *Monthly Notices of the Royal Astronomical Society*, Volume 474, pp. 1688-1704 (2018)
79. D. P. Marrone, J. S. Spilker, C. C. Hayward, J. D. Vieira, M. Aravena, M. L. N. Ashby, **M. B. Bayliss**, M. Bethermin, M. Brodwin, M. S. Bothwell, J. E. Carlstrom, S. C. Chapman, Chian-Chou Chen, T. M. Crawford, D. J. M. Cunningham, C. De Breuck, C. D. Fassnacht, A. H. Gonzalez, T. R. Greve, Y. Hezaveh, K. Lacaille, K. C. Litke, S. Lower, J. Ma, M. Malkan, T. B. Miller, W. R. Morningstar, E. J. Murphy, D. Narayanan, K. A. Phadke, K. M. Rotermund, J. Sreevani, B. Stalder, A. A. Stark, M. L. Strandet, M. Tang, & A. Weiss, “Galaxy Growth in a Massive Halo in the First Billion Years of Cosmic History”, *Nature*, Volume 553, pp. 51–54 (2018)
78. Rigby, J. R.; **Bayliss, M. B.**; Chisholm, J.; Bordoloi, R.; Sharon, K.; Gladders, M. D.; Johnson, T.; Paterno-Mahler, R.; Wuyts, E.; Dahle, H.; Acharyya, A., “The Magellan Evolution of Galaxies Spectroscopic and Ultraviolet Reference Atlas (MEGaSaURA) II: Stacked Spectra”, *The Astrophysical Journal* Volume 853, pp. 87–104 (2018)
77. Capasso, R.; Saro, A.; Mohr, J. J.; Biviano, A.; Strazzullo, V.; Grandis, S.; Applegate, D. E.; **Bayliss, M. B.**; Benson, B. A.; Bleem, L. E.; Bocquet, S.; Brodwin, M.; Bulbul, E.; Carlstrom, J. E.; Chiu, I.; Dietrich, J. P.; Gupta, N.; de Haan, T.; Hlavacek-Larrondo, J.; Klein, M.; von der Linden, A.; McDonald, M.; Rapetti, D.; Reichardt, C. L.; Sharon, K.; Stalder, B.; Stanford, S. A.; Stark, A. A.; Stern, C.; Zenteno, A., “Galaxy Kinematics and Mass Calibration in Massive SZE Selected Galaxy Clusters to $z=1.3$ ”, submitted to *Monthly Notices of the Royal Astronomical Society*, ArXiv: e-print 1711.09903 (2017)
76. Dietrich, J. P.; Bocquet, S.; Schrabback, T.; Hoekstra, H.; Grandis, S.; Mohr, J. J.; Allen, S. W.; **Bayliss, M. B.**; Benson, B. A.; Bleem, L. E.; Brodwin, M.; Bulbul, E.; Capasso, R.; Chiu, I.; Crawford, T. M.; Gonzalez, A. H.; de Haan, T.; Klein, M.; von der Linden, A.; Mantz, A. B.; Marrone, D. P.; McDonald, M.; Raghunathan, S.; Rapetti, D.; Reichardt, C. L.; Saro, A.; Stalder, B.; Stark, A.; Stern, C.; Stubbs, C., “Sunyaev-Zel’dovich Effect and X-ray Scaling Relations from Weak-Lensing Mass Calibration of 32 SPT Selected Galaxy Clusters”, Submitted to *Monthly Notices of the Royal Astronomical Society*, ArXiv: e-print 1711.05344 (2017)
75. Rivera-Thorsen, T. Emil; Dahle, Hakon; Gronke, Max; **Bayliss, Matthew**; Rigby, Jane; Simcoe, Robert; Bordoloi, Rongmon; Turner, Monica; Furesz, Gabor, “The Sunburst Arc: Direct Lyman- α escape observed in the brightest known lensed galaxy”, submitted to *Astronomy & Astrophysics Letters*, Volume 608, pp. 4–7 (2017)

74. Gonzalez-Lpez, Jorge; Barrientos, L. Felipe; Gladders, M. D.; Wuyts, Eva; Rigby, Jane; Sharon, Keren; Aravena, Manuel; **Bayliss, Matthew B.**; Ibar, Eduardo, “ALMA Resolves the Molecular Gas in a Young Low-metallicity Starburst Galaxy at $z = 1.7$ ”, *The Astrophysical Journal Letters*, Volume 846, pp. 22–29 (2017)
73. **Bayliss, Matthew B.**; Sharon, Keren; Acharyya, Ayan; Gladders, Michael D.; Rigby, Jane R.; Bian, Fuyan; Bordoloi, Rongmon; Runnoe, Jessie; Dahle, Hakon; Kewley, Lisa; Florian, Michael; Johnson, Traci; Paterno-Mahler, Rachel, “Spatially Resolved Patchy Ly α Emission within the Central Kiloparsec of a Strongly Lensed Quasar Host Galaxy at $z = 2.8$ ”, *The Astrophysical Journal Letters*, Volume 845, pp. 14–20, (2017)
72. Johnson, Traci L.; Rigby, Jane R.; Sharon, Keren; Gladders, Michael D.; Florian, Michael; **Bayliss, Matthew B.**; Wuyts, Eva; Whitaker, Katherine E.; Livermore, Rachael; Murray, Katherine T., “Star Formation at $z = 2.481$ in the Lensed Galaxy SDSS J1110+6459: Star Formation Down to 30 pc Scales”, *The Astrophysical Journal Letters*, Volume 843, pp. 21–25 (2017)
71. Rigby, J. R.; Johnson, T. L.; Sharon, K.; Whitaker, K.; Gladders, M. D.; Florian, M.; Lotz, J.; **Bayliss, M.**; Wuyts, E., “Star Formation at $z = 2.481$ in the Lensed Galaxy SDSS J1110+6459. II. What is Missed at the Normal Resolution of the Hubble Space Telescope?”, *The Astrophysical Journal*, Volume 843, pp. 79–87 (2017)
70. Johnson, Traci L.; Sharon, Keren; Gladders, Michael D.; Rigby, Jane R.; **Bayliss, Matthew B.**; Wuyts, Eva; Whitaker, Katherine E.; Florian, Michael; Murray, Katherine T., “Star Formation at $z = 2.481$ in the Lensed Galaxy SDSS J1110+6459. I. Lens Modeling and Source Reconstruction”, *The Astrophysical Journal*, Volume 843, pp. 78–94 (2017)
69. McDonald, M.; Allen, S. W.; **Bayliss, M.**; Benson, B. A.; Bleem, L. E.; Brodwin, M.; Bulbul, E.; Carlstrom, J. E.; Forman, W. R.; Hlavacek-Larrondo, J.; Garmire, G. P.; Gaspari, M.; Gladders, M. D.; Mantz, A. B.; Murray, S. S., “The Remarkable Similarity of Massive Galaxy Clusters from $z \sim 0$ to $z \sim 1.9$ ”, *The Astrophysical Journal*, Volume 843, pp. 28–42 (2017)
68. Hennig, C.; Mohr, J. J.; Zenteno, A.; Desai, S.; Dietrich, J. P.; Bocquet, S.; Strazzullo, V.; Saro, A.; Abbott, T. M. C.; Abdalla, F. B.; **Bayliss, M.**; Benoit-Levy, A.; Bernstein, R. A.; Bertin, E.; Brooks, D.; Capasso, R.; Capozzi, D.; Carnero, A.; Carrasco Kind, M.; Carretero, J.; Chiu, I.; D’Andrea, C. B.; daCosta, L. N.; Diehl, H. T.; Doel, P.; Eifler, T. F.; Evrard, A. E.; Fausti-Neto, A.; Fosalba, P.; Frieman, J.; Gangkofner, C.; Gonzalez, A.; Gruen, D.; Gruendl, R. A.; Gupta, N.; Gutierrez, G.; Honscheid, K.; Hlavacek-Larrondo, J.; James, D. J.; Kuehn, K.; Kuropatkin, N.; Lahav, O.; March, M.; Marshall, J. L.; Martini, P.; McDonald, M.; Melchior, P.; Miller, C. J.; Miquel, R.; Neilsen, E.; Nord, B.; Ogando, R.; Plazas, A. A.; Reichardt, C.; Romer, A. K.; Rozo, E.; Rykoff, E. S.; Sanchez, E.; Santiago, B.; Schubnell, M.; Sevilla-Noarbe, I.; Smith, R. C.; Soares-Santos, M.; Sobreira, F.; Stalder, B.; Stanford, S. A.; Suchyta, E.; Swanson, M. E. C.; Tarle, G.; Thomas, D.; Vikram, V.; Walker, A. R.; Zhang, Y., “Galaxy Populations in Massive Galaxy Clusters to $z=1.1$: Color Distribution, Concentration, Halo Occupation Number and Red Sequence Fraction”, *Monthly Notices of the Royal Astronomical Society* (in press), Volume 467, pp. 4015–4035 (2017)
67. **Bayliss, Matthew B.**; Zengo, Kyle; Ruel, Jonathan; Benson, Bradford A.; Bleem, Lindsey E.; Bocquet, Sebastian; Bulbul, Esra; Brodwin, Mark; Capasso, Raffaella; Chiu, I-non; McDonald, Michael; Rapetti, David; Saro, Alex; Stalder, Brian; Stark, Antony A.; Strazzullo, Veronica; Stubbs, Christopher W.; Zenteno, Alfredo, “Velocity Segregation and Systematic Biases In Velocity Dispersion Estimates With the SPT-GMOS Spectroscopic Survey”, *The Astrophysical Journal*, Volume 837, pp. 88–104 (2017)
66. Russell, H. R.; McDonald, M.; McNamara, B. R.; Fabian, A. C.; Nulsen, P. E. J.; **Bayliss, M. B.**; Benson, B. A.; Brodwin, M.; Carlstrom, J. E.; Edge, A. C.; Hlavacek-Larrondo, J.; Marrone, D. P.;

- Reichardt, C. L.; Vieira, J. D., “ALMA Observations of Massive Molecular Gas Filaments Encasing Radio Bubbles in the Phoenix Cluster”, *The Astrophysical Journal*, Volume 836, pp. 130–138, (2017)
65. Sweet, Sarah M.; Sharp, Robert; Glazebrook, Karl; Rigaut, Francois; Carrasco, Eleazar R.; Brodwin, Mark; **Bayliss, Matthew**; Stalder, Brian; Abraham, Roberto; McGregor, Peter, “The stellar mass - size relation for cluster galaxies at $z=1$ with high angular resolution from the Gemini/GeMS multi-conjugate adaptive optics system”, *Monthly Notices of the Royal Astronomical Society*, Volume 464, pp. 2910–2929 (2017)
64. Sharon, Keren; **Bayliss, Matthew B.**; Dahle, Hakon; Florian, Michael K.; Gladders, Michael D.; Johnson, Traci L.; Paterno-Mahler, Rachel; Rigby, Jane R.; Whitaker, Katherine E.; Wuyts, Eva, “Lens Model and Time Delay Predictions for the Sextuply Lensed Quasar SDSS J2222+2745”, *The Astrophysical Journal*, Volume 835, pp. 5–19 (2017)
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