

Alice E. Shapley: Publications

1. “Submillimeter Galaxies at $z \sim 2$: Evidence for Major Mergers & Constraints on Lifetimes, IMF and CO-H₂ Conversion Factor.” L. J. Tacconi, R. Genzel, I. Smail, R. Neri, S. C. Chapman, R. J. Ivison, A. Blain, P. Cox, A. Omont, F. Bertoldi, T. Greve, N. M. Förster Schreiber, S. Genel, D. Lutz, A. M. Swinbank, A. E. Shapley, D. K. Erb, A. Cimatti, E. Daddi, A. J. Baker. *The Astrophysical Journal*, accepted (astro-ph/0801.3650).
2. “The Varied Fates of $z \sim 2$ Star-forming Galaxies.” C. Conroy, A. E. Shapley, J. Tinker, M. R. Santos. *The Astrophysical Journal*, accepted (astro-ph/0711.0001).
3. “The Mass-Metallicity Relation and Physical Conditions in DEEP2 Star-forming Galaxies at $z \geq 1$.” X. Liu, A. E. Shapley, A. L. Coil, C.-P. Ma. *The Astrophysical Journal*, accepted (astro-ph/0801.1670).
4. “Multi-Wavelength Constraints on the Cosmic Star Formation History from Spectroscopy: the Rest-Frame UV, H-alpha, and Infrared Luminosity Functions at Redshifts $1.9 < z < 3.4$.” N. A. Reddy, C. C. Steidel, M. Pettini, K. L. Adelberger, A. E. Shapley, D. K. Erb, M. Dickinson. 2008, *The Astrophysical Journal Supplement*, 175, 48.
5. “The Sightline to Q2343-BX415: Clues to Galaxy Formation in a Quasar Environment.” S. A. Rix, M. Pettini, C. C. Steidel, N. A. Reddy, K. L. Adelberger, D. K. Erb, A. E. Shapley. 2007, *The Astrophysical Journal*, 670, 15.
6. “Integral Field Spectroscopy of High-Redshift Star Forming Galaxies with Laser Guided Adaptive Optics: Evidence for Dispersion-Dominated Kinematics.” D. R. Law, C. C. Steidel, D. K. Erb, J. E. Larkin, M. Pettini, A. E. Shapley, S. A. Wright. 2007, *The Astrophysical Journal*, 669, 929.
7. “Dynamical Properties of $z \sim 2$ Star Forming Galaxies and a Universal Star Formation Relation.” N. Bouche, G. Cresci, R. Davies, F. Eisenhaur, N. M. Förster Schreiber, R. Genzel, S. Gillessen, M. Lehnert, D. Lutz, N. Nesvadba, K. L. Shapiro, A. Sternberg, L. J. Tacconi, A. Verma, A. Cimatti, E. Daddi, A. Renzini, D. K. Erb, C. C. Steidel, A. E. Shapley. 2007, *The Astrophysical Journal*, 671, 303.
8. “Morphologies of Galaxies in and Around a Protocluster at $z = 2.300$.” A. H. G. Peter, A. E. Shapley, D. R. Law, C. C. Steidel, D. K. Erb, N. A. Reddy, M. Pettini. 2007, *The Astrophysical Journal*, 668, 23.
9. “The Physical Nature of Rest-UV Galaxy Morphology During the Peak Epoch of Galaxy Formation.” D. R. Law, C. C. Steidel, D. K. Erb, M. Pettini, N. A. Reddy, A. E. Shapley, K. L. Adelberger, D. J. Simenc. 2007, *The Astrophysical Journal*, 656, 1.
10. “A Spectroscopic Survey of Redshift $1.4 < z < 3.0$ Galaxies in the Goods-North Field: Survey Description, Catalogs, and Properties.” N. A. Reddy, C. C. Steidel, D. K. Erb, A. E. Shapley, M. Pettini. 2006, *The Astrophysical Journal*, 653, 1004.
11. “The Direct Detection of Lyman-Continuum Emission From Star-forming Galaxies at $z \sim 3$.” A. E. Shapley, C. C. Steidel, M. Pettini, K. L. Adelberger, D. K. Erb. 2006, *The Astrophysical Journal*, 651, 688.

12. “H- α Observations of a Large Sample of Galaxies at $z \sim 2$: Implications for Star Formation in High-Redshift Galaxies.” D. K. Erb, C. C. Steidel, A. E. Shapley, M. Pettini, N. A. Reddy, K. L. Adelberger. 2006, *The Astrophysical Journal*, 657, 128.
13. “The Stellar, Gas and Dynamical Masses of Star-forming Galaxies at $z \sim 2$.” D. K. Erb, C. C. Steidel, A. E. Shapley, M. Pettini, N. A. Reddy, K. L. Adelberger. 2006, *The Astrophysical Journal*, 646, 107.
14. “SINFONI Integral Field Spectroscopy of $z \sim 2$ Galaxies: Rotation Curves and Metallicity Gradients.” N. M. Förster Schreiber, R. Genzel, M. D. Lehnert, N. Bouche, A. Verma, D. K. Erb, A. E. Shapley, C. C. Steidel, et al. 2006, *The Astrophysical Journal*, 645, 1062.
15. “The Mass-Metallicity Relation at $z \geq 2$.” D. K. Erb, A. E. Shapley, M. Pettini, C. C. Steidel, N. A. Reddy, K. L. Adelberger. 2006, *The Astrophysical Journal*, 644, 813.
16. “Star Formation and Extinction in Redshift $z \sim 2$ Galaxies: Inferences from *Spitzer* MIPS Observations.” N. A. Reddy, C. C. Steidel, D. Fadda, L. Yan, M. Pettini, A. E. Shapley, D. K. Erb, K. L. Adelberger. 2006, *The Astrophysical Journal*, 644, 792.
17. “Chemical Abundances of DEEP2 Star-forming Galaxies at $z \sim 1.0-1.5$.” A. E. Shapley, A. L. Coil, C.-P. Ma, K. Bundy. 2005, *The Astrophysical Journal*, 635, 1006.
18. “A Census of Optical and Near-Infrared Selected Star-Forming and Passively Evolving Galaxies at Redshift $z \sim 2$.” N. A. Reddy, D. K. Erb, C. C. Steidel, A. E. Shapley, K. L. Adelberger, M. Pettini. 2005, *The Astrophysical Journal*, 633, 748.
19. “The Connection Between Galaxies and Intergalactic Absorption Lines at Redshift $2 < z < 3$.” K. L. Adelberger, A. E. Shapley, C. C. Steidel, M. Pettini, D. K. Erb, N. A. Reddy. 2005, *The Astrophysical Journal*, 629, 636.
20. “Ultraviolet to Mid-Infrared Observations of Star-forming Galaxies at $z \sim 2$: Stellar Masses and Stellar Populations.” A. E. Shapley, C. C. Steidel, D. K. Erb, N. A. Reddy, K. L. Adelberger, M. Pettini, P. Barmby, J. Huang. 2005, *The Astrophysical Journal*, 626, 698.
21. “Spectroscopic Identification of a Protocluster at $z = 2.300$: Environmental Dependence of Galaxy Properties at High Redshift.” C. C. Steidel, K. L. Adelberger, A. E. Shapley, D. K. Erb, N. A. Reddy, M. Pettini. 2005, *The Astrophysical Journal*, 626, 44.
22. “Strong Spatial Clustering of Ultraviolet-selected Galaxies with Magnitude $K_s < 20.5$ and Redshift $z \sim 2$.” K. L. Adelberger, D. K. Erb, C. C. Steidel, N. A. Reddy, M. Pettini, A. E. Shapley. 2005, *The Astrophysical Journal Letters*, 620, 75.
23. “The Spatial Clustering of Star-forming Galaxies at Redshifts $1.4 \leq z \leq 3.5$.” K. L. Adelberger, C. C. Steidel, D. K. Erb, N. A. Reddy, A. E. Shapley, M. Pettini. 2005, *The Astrophysical Journal*, 619, 697.
24. “Deep mid-infrared observations of Lyman-break galaxies.” P. Barmby, J.-S. Huang, G. G. Fazio, J. A. Surace, R. G. Arendt, J. L. Hora, M. A. Pahre, K. L. Adelberger, P. Eisenhardt, D. K. Erb, M. Pettini, W. T. Reach, N. A. Reddy, A. E. Shapley, C. C. Steidel, D. Stern, Z. Wang, S. P. Willner. 2004, *The Astrophysical Journal Supplement*, 154, 97.

25. “Evidence for Solar Metallicities in Star-forming Galaxies at $z \geq 2$.” A. E. Shapley, D. K. Erb, M. Pettini, C. C. Steidel, & K. L. Adelberger. 2004, *The Astrophysical Journal*, 612, 108.
26. “The Kinematics of Morphologically Selected $z \sim 2$ Galaxies in the GOODS-North Field.” D. K. Erb, C. C. Steidel, A. E. Shapley, M. Pettini & K. L. Adelberger. 2004, *The Astrophysical Journal*, 612, 122.
27. “Optical Selection of Galaxies at Redshifts $1 < z < 3$.” K. L. Adelberger, C. C. Steidel, A. E. Shapley, M. P. Hunt, D. K. Erb, N. A. Reddy, & M. Pettini. 2004, *The Astrophysical Journal*, 607, 226.
28. “The Faint End of the QSO Luminosity Function at $z = 3$.” M. P. Hunt, C. C. Steidel, K. L. Adelberger, & A. E. Shapley. 2004, *The Astrophysical Journal*, 605, 625.
29. “Spectroscopy of Star-forming Galaxies in the $1.4 \leq z \leq 2.5$ ‘Redshift Desert’ with Keck/LRIS-B.” C. C. Steidel, A. E. Shapley, M. Pettini, K. L. Adelberger, D. K. Erb, N. A. Reddy, & M. P. Hunt. 2004, *The Astrophysical Journal*, 604, 534.
30. “Lyman Break Galaxies at Redshift $z \sim 3$: Survey Description and Full Data Set.” C. C. Steidel, K. L. Adelberger, A. E. Shapley, M. Pettini, M. Dickinson, & M. Giavalisco. 2003, *The Astrophysical Journal*, 592, 728.
31. “ $H\alpha$ Spectroscopy of Galaxies at $z > 2$: Kinematics and Star Formation.” D. K. Erb, A. E. Shapley, C. C. Steidel, M. Pettini, K. L. Adelberger, M. P. Hunt, A. F. M. Moorwood, & J. G. Cuby. 2003, *The Astrophysical Journal*, 591, 101.
32. “Rest-frame Ultraviolet Spectra of $z \sim 3$ Lyman Break Galaxies.” A. E. Shapley, C. C. Steidel, M. Pettini, & K. L. Adelberger. 2003, *The Astrophysical Journal*, 588, 65.
33. “Galaxies and Intergalactic Matter at Redshift $z \sim 3$ I: Overview.” K. L. Adelberger, C. C. Steidel, A. E. Shapley, & M. Pettini. 2003, *The Astrophysical Journal*, 584, 45.
34. “The Population of Faint Optically-Selected AGN at $z \sim 3$.” C. C. Steidel, M.P. Hunt, A.E. Shapley, K.L. Adelberger, M. Pettini, M. Dickinson, & M. Giavalisco. 2002, *The Astrophysical Journal*, 576, 653.
35. “Westphal-MMD 11: An Interacting, Submillimeter Luminous Lyman Break Galaxy.” S. C. Chapman, A. E. Shapley, & C. C. Steidel. 2002, *The Astrophysical Journal Letters*, 572, L1.
36. “The Kinematic Connection between absorbing Gas toward QSOs and Galaxies at Intermediate Redshift.” C. C. Steidel, J. A. Kollmeier, A. E. Shapley, C. W. Churchill, M. Pettini, & M. Dickinson. 2002, *The Astrophysical Journal*, 570, 526.
37. “New Observations of the Interstellar Medium in the Lyman Break Galaxy MS 1512-cB58.” M. Pettini, S. A. Rix, C. C. Steidel, K. L. Adelberger, M. P. Hunt, & A. E. Shapley. 2002, *The Astrophysical Journal*, 569, 742.
38. “A Multivariate Statistical Analysis of Spiral Galaxy Luminosities. II. Morphology-dependent Multiwavelength Emission Properties.” G. Fabbiano & A. E. Shapley. 2002, *The Astrophysical Journal*, 565, 908.

39. “MS 1512-cB58: A case study of star formation, metal enrichment and superwinds in Lyman break galaxies.” M. Pettini, S. A. Rix, C. C. Steidel, A. E. Shapley, & K. L. Adelberger. 2002, *Astrophysics & Space Science*, 281, 461.
40. “The Rest-Frame Optical Properties of $z \simeq 3$ Galaxies.” A. E. Shapley, C. C. Steidel, K. L. Adelberger, M. Dickinson, M. Giavalisco, & M. Pettini. 2001, *The Astrophysical Journal*, 562, 95.
41. “A Multivariate Statistical Analysis of Spiral Galaxy Luminosities. I. Data and Results.” A. E. Shapley, G. Fabbiano, & P. B. Eskridge. 2001, *The Astrophysical Journal Supplement*, 137, 139.
42. “The Farthest Known Supernova: Support for an Accelerating Universe and a Glimpse of the Epoch of Deceleration.” A. G. Riess, P. E. Nugent, R. L. Gilliland, B. P. Schmidt, J. Tonry, M. Dickinson, R. I. Thompson, T. Budavari, S. Casertano, A. S. Evans, A. V. Filippenko, M. Livio, D. B. Sanders, A. E. Shapley, H. Spinrad, C. C. Steidel, D. Stern, J. Surace, & S. Veilleux. 2001, *The Astrophysical Journal*, 560, 49.
43. “The Rest-Frame Optical Spectra of Lyman Break Galaxies: Star Formation, Extinction, Abundances, and Kinematics.” M. Pettini, A. E. Shapley, C. C. Steidel, J. G. Cuby, M. Dickinson, A. F. Moorwood, K. L. Adelberger, & M. Giavalisco. 2001, *The Astrophysical Journal*, 554, 981.
44. “An Imaging and Spectroscopic Study of the $z_{abs} = 3.38639$ Damped Ly α System in Q0201+1120: Clues to Star Formation at High Redshift.” S. L. Ellison, M. Pettini, C. C. Steidel, & A. E. Shapley. 2001, *The Astrophysical Journal*, 549, 770.
45. “Submillimeter Imaging of a Protocluster Region at $z=3.09$.” S. C. Chapman, G. F. Lewis, D. Scott, E. Richards, C. C. Steidel, K. L. Adelberger, & A. E. Shapley. 2001, *The Astrophysical Journal Letters*, 548, 17.
46. “The Unusual Infrared Object HDF-N J123656.3+621322.” M. Dickinson, C. Hanley, R. Elston, P. R. Eisenhardt, S. A. Stanford, K. L. Adelberger, A. E. Shapley, C. C. Steidel, C. Papovich, A. S. Szalay, M. Bershad, C. J. Conselice, H. C. Ferguson, & A. S. Fruchter. 2000, *The Astrophysical Journal*, 531, 624.
47. “Si and Mn Abundances in Damped Ly α Systems with Low Dust Content.” M. Pettini, S. L. Ellison, C. C. Steidel, A. E. Shapley, & D. V. Bowen. 2000, *The Astrophysical Journal*, 532, 65.
48. “Ly α Imaging of a Proto-Cluster Region at $\langle z \rangle = 3.09$.” C. C. Steidel, K. L. Adelberger, A. E. Shapley, M. Pettini, M. Dickinson, & M. Giavalisco. 2000, *The Astrophysical Journal*, 532, 170.