

Dawn Erb

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Research Interests

Galaxy formation and evolution
Low mass galaxies at all redshifts
Evolution of the circumgalactic and intergalactic medium at high redshift
Chemical evolution, kinematics and stellar populations of galaxies at high redshift
Feedback processes in starburst galaxies
Gas ejection and accretion in high redshift galaxies

Employment

University of Wisconsin-Milwaukee <i>Associate Professor, Department of Physics</i>	<i>Milwaukee, WI</i> 2014 – present
University of Wisconsin-Madison <i>Visiting Associate Professor, Department of Astronomy</i>	<i>Madison, WI</i> 2014 – present
Stockholm University <i>Visiting Professor, Department of Astronomy</i>	<i>Stockholm, Sweden</i> 2018
University of Wisconsin-Milwaukee <i>Assistant Professor, Department of Physics</i>	<i>Milwaukee, WI</i> 2010 – 2014
University of Wisconsin-Madison <i>Visiting Assistant Professor, Department of Astronomy</i>	<i>Madison, WI</i> 2010 – 2014
University of California Santa Barbara <i>Spitzer Postdoctoral Fellow</i>	<i>Santa Barbara, CA</i> 2008 – 2010
Harvard-Smithsonian Center for Astrophysics <i>CfA Postdoctoral Fellow</i>	<i>Cambridge, MA</i> 2005 – 2008

Education

California Institute of Technology <i>Ph.D. Astrophysics</i> <ul style="list-style-type: none">“The Properties of Star-Forming Galaxies at $z \sim 2$: Kinematics, Stellar Populations, and Metallicities” — Research Advisor: Professor Charles C. Steidel	<i>Pasadena, CA</i> 2005
University of Washington <i>B.S. Physics, Summa cum laude</i> <i>B.S. Astronomy, Summa cum laude</i>	<i>Seattle, WA</i> 2000

Grants and Proposals

Total extramural funding	\$1,675,000
National Science Foundation <i>The Extreme Galaxy Reference Sample: Low Metallicity Galaxies Across Cosmic Time</i>	\$381,351 2019
UWM Research Growth Initiative <i>The Extreme Census of the Local Universe: The Most Highly Ionized Galaxies in the Northern Sky</i>	\$73,000 2019

NASA Keck PI Data Awards*9 nights (KCWI, LRIS, MOSFIRE, ESI)**\$100,100 total**2013 – 2019***UWM Collaborative Research Team Development Award***The Milwaukee Urban Observatory**\$14,770**2018 – 2020***Space Telescope Science Institute***The Brightest Lens in the Sky: Stellar Populations on ~50 pc Scales at the Peak Epoch of Star Formation**3 orbits, \$50,972**Hubble Space Telescope Cycle 25 (2017)***Space Telescope Science Institute***Lyman-alpha Imaging at ~20 pc Resolution in a Low Mass Lensed Galaxy at $z=1.85$* *7 orbits, \$62,595**Hubble Space Telescope Cycle 24 (2016)***Space Telescope Science Institute***The Evolution of C/O in Low Metallicity Dwarf Galaxies (PI Danielle Berg)**20 orbits, UWM budget \$113,360**Hubble Space Telescope Cycle 24 (2016)***Space Telescope Science Institute***Stellar Populations and Physical Conditions at ~100 pc Resolution in a Lensed Galaxy at $z\sim 4$ (PI Danielle Berg)**2 orbits, \$7,625**Hubble Space Telescope Cycle 23 (2015)***National Science Foundation Early Career Award***CAREER: The Early Stages of Galaxy Evolution**\$779,965**2013***Space Telescope Science Institute***Gaseous outflows from low mass galaxies: Understanding local laboratories for high redshift star formation (PI Alaina Henry)**26 orbits, UWM budget \$18,000**Hubble Space Telescope Cycle 20 (2012)***NASA Herschel Science Center***The Herschel Proto-cluster Survey: SPIRE Mapping of the Nodes of the Cosmic Web at $z>2$ (PI Yuichi Matsuda)**UWM budget \$9,647**OT2 (2012)***Space Telescope Science Institute***The Bottom of the Iceberg: Faint $z\sim 2$ Galaxies and the Enrichment of the IGM**30 orbits, UWM budget \$93,000**Hubble Space Telescope Cycle 19 (2011)***Space Telescope Science Institute***3D-HST: A Spectroscopic Galaxy Evolution Treasury (PI Pieter van Dokkum)**248 orbits, UWM budget \$42,000**Hubble Space Telescope Cycle 18 (2010)***UWM Research Growth Initiative***The Youngest Galaxies in the Young Universe**\$307,000**2010*

Awards and Honors

Research Mentor of the Year, UWM Office of Undergraduate Research*2020***Wenner-Gren Foundation Visiting Researcher Award, Stockholm University***2018***Kavli Fellow, National Academy of Sciences Kavli Frontiers of Science***2018***UWM Research Foundation Award***2017***Spitzer Fellowship***2008***Center for Astrophysics Fellowship***2005***Baer Prize in Astronomy***University of Washington, 2000***Higgs-Osborn Prize in Experimental Physics***University of Washington, 2000*

Professional Service and Appointments

Gemini Telescope Board of Directors*2017 – 2019***Hubble Space Telescope Users Committee***2015 – 2019***Associate Editor, Publications of the Astronomical Society of Australia***2013 – 2015***Hubble Space Telescope review panel***2006, 2010, 2013, 2016, 2019 (chair)*

NSF review panel	2007, 2008, 2010, 2013, 2020
NOAO telescope allocation committee	2012 – 2015
Spitzer Space Telescope review panel	2010, 2011 (panel chair)
NASA Postdoctoral Program review	2011
NRAO proposal review	2007 – 2008
Peer review	2004 – present
<i>Nature, Science, The Astrophysical Journal, The Astrophysical Journal Letters, The Astronomical Journal, Monthly Notices of the Royal Astronomical Society, Astronomy & Astrophysics, Publications of the Astronomical Society of the Pacific</i>	

Teaching

Astronomy 103: Survey of Astronomy	Spring 2013, 2014, 2015, 2017, 2018, 2019; Fall 2015, 2017, 2019
Astronomy 320: Astronomy II: Extragalactic Astronomy and Cosmology	Spring 2011
Astronomy 401: Astrophysics II: Extragalactic Astrophysics and Cosmology	Spring 2013
Astronomy 401/Physics 903: Astrophysics II: Extragalactic Astrophysics and Cosmology	Spring 2015, 2017, 2019
Physics 817: Cosmology	Fall 2011, Spring 2014, Spring 2018, Fall 2019

Outreach

Advisor, UWM Astronomy Club	2010 – present
Maker Faire Milwaukee: Center for Gravitation, Cosmology & Astrophysics booth	2016, 2017, 2019
Public lectures	2012 – 2019
<ul style="list-style-type: none"> • Osher Lifetime Learning Institute • UWM Science Bag • Wehr Astronomical Society • NCRA 2014: Gazing at the Stars • James Madison High School, Milwaukee • Milwaukee Astronomical Society • Vieau School, Milwaukee 	

Invited Conference Presentations

Mapping the circumgalactic medium with Lyα emission	September 2019
<i>GMT Community Science Meeting, Carlsbad, CA</i>	
Small galaxies, big halos: Lyα emission in the CGM of low-mass galaxies at $z \sim 2$	July 2019
<i>Small Galaxies, Cosmic Questions, Durham, UK</i>	
Lyα Emission and the Circumgalactic Medium in Low Mass Galaxies	June 2019
<i>What matter(s) between galaxies, Spineto, Italy</i>	
Lyα Emission and the Circumgalactic Medium in Low Mass Galaxies	September 2018
<i>Escape of Lyman radiation from galactic labyrinths, Kolymbari, Crete, Greece</i>	
Lyα Emission in Low Metallicity Galaxies at $z \sim 2$	March 2018
<i>Tokyo Spring Sakura Cosmic Lyα Workshop, University of Tokyo</i>	

Observing Outflows at High Redshifts

Characterizing Galaxies with Spectroscopy with a view for JWST, Lorentz Center, Leiden, Netherlands

October 2017

Star Formation and Feedback in Low Metallicity Galaxies at $z \sim 2$

Keynote presentation, MidAmerican Regional Astrophysics Conference, University of Kansas

April 2017

The Rest-Frame UV Spectra of Low Mass Galaxies at $z \sim 2$

32nd Institut d'Astrophysique de Paris Colloquium, Cosmic dawn of galaxy formation: linking observations and theory with new-generation spectral models. Paris

July 2016

Ly α Profiles and Lyman Continuum Emission in Star-Forming Galaxies

Escape of Lyman radiation from galactic labyrinths, Kolymbari, Crete, Greece

April 2016

The physical conditions in young, low metallicity galaxies at high redshift

Understanding Nebular Emission in High Redshift Galaxies, Pasadena, CA

July 2015

Galactic Outflows and Galactic Structure at $z \sim 2$

Good Sense and Dominant Ideology in Galaxy Formation and Evolution, Ascona, Switzerland

July 2014

Gas Flows and Galaxy Formation

Plenary talk, 221st Meeting of the American Astronomical Society, Long Beach, CA

January 2013

Rising Star Formation Histories and the Evolution of the Mass-Metallicity Relation

Galaxies: Insight Out, Leiden, the Netherlands

July 2012

Rising Star Formation Histories and the Evolution of the Mass-Metallicity Relation

Metals in Tuscany, Spineto, Italy

June 2012

Chemical Abundances in Star-Forming Galaxies at High Redshift

International Astronomical Union Symposium 265, Rio de Janeiro

August 2009

Star Formation and Chemical Enrichment in the Youngest Galaxies

SFR@50, Spineto, Italy

July 2009

The Mass-Dependent Spectral Properties of High Redshift Galaxies

Napa Valley Galaxy Evolution Workshop, Napa, CA

February 2009

Galaxy Metallicity in the Redshift Desert

Harvesting the Desert: The Universe Between Redshifts 1 and 3, Marseille

July 2009

Observing Distant Galaxies with the GMT

Science with the Giant Magellan Telescope, Australian National University, Canberra, Australia

March 2008

Gas Masses and Gas Fractions: Applications of the Kennicutt-Schmidt Law at High Redshift

University of California San Diego Kennicutt-Schmidt Workshop

December 2006

Galactic Winds, Galaxy Masses and Metallicities at $1 < z < 3$: An observational perspective

Chemodynamics: From First Stars to Local Galaxies, Lyon, France

July 2006

Colloquia and Seminars

New York University

March 2019

University of Oslo

December 2018

University of Geneva

November 2018

University of Copenhagen

November 2018

Stockholm University

September 2018

University of Kansas

April 2017

University of Toronto

December 2016

University of Wisconsin Madison	September 2016
University of Arizona	March 2016
University of Washington	March 2016
Ohio State University	March 2016
Arizona State University	September 2015
Northwestern University	April 2015
Space Telescope Science Institute	March 2014
University of Virginia/NRAO	September 2013
University of Minnesota	April 2013
University of Texas Austin	March 2013
University of Wisconsin Madison	February 2013
Cornell University	November 2012
University of Notre Dame	March 2012
Indiana University	November 2011
Northwestern University	April 2010
University of Wisconsin Madison	April 2010
University of Chicago	October 2009
Texas A&M University	September 2009
University of Wisconsin Milwaukee	March 2009
Princeton University	February 2009
University of Massachusetts Amherst	October 2008
Carnegie Observatories	March 2008
Harvard University	March 2008
Ohio State University	February 2008
University of Utah	January 2008
University of Michigan	January 2008
University of California San Diego	January 2008
Harvard University	February 2007
Space Telescope Science Institute	February 2007
University of California Los Angeles	February 2007
University of Central Lancashire, Preston, UK	July 2006
University of California Santa Cruz	May 2006
University of Toronto	February 2006

Refereed Publications

Total citations	13,552
Total citations to first author papers	2,522
h-index	52

76. "Subkiloparsec Imaging of Ly α Emission in a Low-mass, Highly Ionized, Gravitationally Lensed Galaxy at $z=1.84$." **Erb, D. K.**, Berg, D. A., Auger, M. W., Kaplan, D. L., Brammer, G., & Pettini, M. 2019, *Astrophysical Journal*, 884, 7
75. "Intense C IV and He II Emission in $z\sim 0$ Galaxies: Probing High-energy Ionizing Photons." Berg, D. A., Chisholm, J., **Erb, D. K.**, Pogge, R., Henry, A., & Olivier, G. M. 2019, *Astrophysical Journal Letters*, 878, L3
74. "The Chemical Evolution of Carbon, Nitrogen, and Oxygen in Metal-poor Dwarf Galaxies." Berg, D. A., **Erb, D. K.**, Henry, R. B. C.,

Skillman, E. D., & McQuinn, K. B. W. 2019, *Astrophysical Journal*, 874, 93

73. “The Kinematics of Extended Ly α Emission in a Low-mass, Low-metallicity Galaxy at $z=2.3$.” **Erb, D. K.**, Steidel, C. C., & Chen, Y. 2018, *Astrophysical Journal Letters*, 862, L10
72. “A Window on the Earliest Star Formation: Extreme Photoionization Conditions of a High-ionization, Low-metallicity Lensed Galaxy at $z\sim 2$.” Berg, D. A., **Erb, D. K.**, Auger, M. W., Pettini, M., & Brammer, G. B. 2018, *Astrophysical Journal*, 859, 164
71. “The Redshift Evolution of Rest-UV Spectroscopic Properties in Lyman-break Galaxies at $z\sim 2-4$.” Du, X., Shapley, A. E., Reddy, N. A., Jones, T., Stark, D. P., Steidel, C. C., Strom, A. L., Rudie, G. C., **Erb, D. K.**, Ellis, R. S., & Pettini, M. 2018, *Astrophysical Journal*, 860, 75
70. “A Close Relationship between Ly α and Mg II in Green Pea Galaxies.” Henry, A., Berg, D. A., Scarlata, C., Verhamme, A., & **Erb, D.** 2018, *Astrophysical Journal*, 855, 96
69. “A High Fraction of Ly α Emitters among Galaxies with Extreme Emission Line Ratios at $z\sim 2$.” **Erb, D. K.**, Pettini, M., Steidel, C. C., Strom, A. L., Rudie, G. C., Trainor, R. F., Shapley, A. E., & Reddy, N. A. 2016, *Astrophysical Journal*, 830, 52
68. “Carbon and Oxygen Abundances in Low Metallicity Dwarf Galaxies.” Berg, D. A., Skillman, E. D., Henry, R. B. C., **Erb, D. K.**, & Carigi, L. 2016, *Astrophysical Journal*, 827, 126
67. “Herschel protocluster survey: a search for dusty star-forming galaxies in protoclusters at $z=2-3$.” Kato, Y., Matsuda, Y., Smail, I., Swinbank, A. M., Hatsukade, B., Umehata, H., Tanaka, I., Saito, T., Iono, D., Tamura, Y., Kohno, K., **Erb, D. K.**, Lehmer, B. D., Geach, J. E., Steidel, C. C., Alexander, D. M., Yamada, T., & Hayashino, T. 2016, *Monthly Notices of the Royal Astronomical Society*, 460, 3861
66. “Ly α Emission from Green Peas: The Role of Circumgalactic Gas Density, Covering, and Kinematics.” Henry, A., Scarlata, C., Martin, C. L., & **Erb, D.** 2015, *Astrophysical Journal*, 809, 19
65. “Feedback in low-mass galaxies in the early Universe.” **Erb, D. K.** 2015, *Nature*, 523, 169
64. “Strong Nebular Line Ratios in the Spectra of $z\sim 2-3$ Star Forming Galaxies: First Results from KBSS-MOSFIRE.” Steidel, C. C., Rudie, G. C., Strom, A. L., Pettini, M., Reddy, N. A., Shapley, A. E., Trainor, R. F., **Erb, D. K.**, Turner, M. L., Konidaris, N. P., Kulas, K. R., Mace, G., Matthews, K., & McLean, I. S. 2014, *Astrophysical Journal*, 795, 165
63. “The Ly α Properties of Faint Galaxies at $z\sim 2-3$ with Systemic Redshifts and Velocity Dispersions from Keck-MOSFIRE.” **Erb, D. K.**, Steidel, C. C., Trainor, R. F., Bogosavljević, M., Shapley, A. E., Nestor, D. B., Kulas, K. R., Law, D. R., Strom, A. L., Rudie, G. C., Reddy, N. A., Pettini, M., Konidaris, N. P., Mace, G., Matthews, K., & McLean, I. S. 2014, *Astrophysical Journal*, 795, 33
62. “Large-scale Star-formation-driven Outflows at $1 < z < 2$ in the 3D-HST Survey.” Lundgren, B. F., Brammer, G., van Dokkum, P., Bezanson, R., Franx, M., Fumagalli, M., Momcheva, I., Nelson, E., Skelton, R. E., Wake, D., Whitaker, K., da Cunha, E., **Erb, D. K.**, Fan, X., Kriek, M., Labbé, I., Marchesini, D., Patel, S., Rix, H. W., Schmidt, K., & van der Wel, A. 2012, *Astrophysical Journal*, 760, 49
61. “Stellar Populations of Ultraviolet-selected Active Galactic Nuclei Host Galaxies at $z\sim 2-3$.” Hainline, K. N., Shapley, A. E., Greene, J. E., Steidel, C. C., Reddy, N. A., & **Erb, D. K.** 2012, *Astrophysical Journal*, 760, 74
60. “A HST/WFC3-IR Morphological Survey of Galaxies at $z=1.5-3.6$. II. The Relation between Morphology and Gas-phase Kinematics.” Law, D. R., Steidel, C. C., Shapley, A. E., Nagy, S. R., Reddy, N. A., & **Erb, D. K.** 2012, *Astrophysical Journal*, 759, 29
59. “Galactic Outflows in Absorption and Emission: Near-ultraviolet Spectroscopy of Galaxies at $1 < z < 2$.” **Erb, D. K.**, Quider, A. M., Henry, A. L., & Martin, C. L. 2012, *Astrophysical Journal*, 759, 26
58. “3D-HST Grism Spectroscopy of a Gravitationally Lensed, Low-metallicity Starburst Galaxy at $z=1.847$.” Brammer, G. B., Sánchez-Janssen, R., Labbé, I., da Cunha, E., **Erb, D. K.**, Franx, M., Fumagalli, M., Lundgren, B., Marchesini, D., Momcheva, I., Nelson, E., Patel, S., Quadri, R., Rix, H.-W., Skelton, R. E., Schmidt, K. B., van der Wel, A., van Dokkum, P. G., Wake, D. A., & Whitaker, K. E. 2012, *Astrophysical Journal Letters*, 758, L17
57. “A Census of Oxygen in Star-forming Galaxies: An Empirical Model Linking Metallicities, Star Formation Rates, and Outflows.” Zahid, H. J., Dima, G. I., Kewley, L. J., **Erb, D. K.**, & Davé, R. 2012, *Astrophysical Journal*, 757, 54
56. “High velocity dispersion in a rare grand-design spiral galaxy at redshift $z=2.18$.” Law, D. R., Shapley, A. E., Steidel, C. C., Reddy, N. A., Christensen, C. R., & **Erb, D. K.** 2012, *Nature*, 487, 338
55. “The Characteristic Star Formation Histories of Galaxies at Redshifts $z\sim 2-7$.” Reddy, N. A., Pettini, M., Steidel, C. C., Shapley, A. E., **Erb, D. K.**, & Law, D. R. 2012, *Astrophysical Journal*, 754, 25
54. “3D-HST: A Wide-field Grism Spectroscopic Survey with the Hubble Space Telescope.” Brammer, G. B., van Dokkum, P. G., Franx, M., Fumagalli, M., Patel, S., Rix, H.-W., Skelton, R. E., Kriek, M., Nelson, E., Schmidt, K. B., Bezanson, R., da Cunha, E., **Erb, D. K.**, Fan, X., Förster Schreiber, N., Illingworth, G. D., Labbé, I., Leja, J., Lundgren, B., Magee, D., Marchesini, D., McCarthy, P., Momcheva, I., Muzzin, A., Quadri, R., Steidel, C. C., Tal, T., Wake, D., Whitaker, K. E., & Williams, A. 2012, *Astrophysical Journals*, 200, 13

53. "The Gaseous Environment of High- z Galaxies: Precision Measurements of Neutral Hydrogen in the Circumgalactic Medium of $z \sim 2-3$ Galaxies in the Keck Baryonic Structure Survey." Rudie, G. C., Steidel, C. C., Trainor, R. F., Rakic, O., Bogosavljević, M., Pettini, M., Reddy, N., Shapley, A. E., **Erb, D. K.**, & Law, D. R. 2012, *Astrophysical Journal*, 750, 67
52. "An HST/WFC3-IR Morphological Survey of Galaxies at $z=1.5-3.6$. I. Survey Description and Morphological Properties of Star-forming Galaxies." Law, D. R., Steidel, C. C., Shapley, A. E., Nagy, S. R., Reddy, N. A., & **Erb, D. K.** 2012, *Astrophysical Journal*, 745, 85
51. "First Results from the 3D-HST Survey: The Striking Diversity of Massive Galaxies at $z > 1$." van Dokkum, P. G., Brammer, G., Fumagalli, M., Nelson, E., Franx, M., Rix, H.-W., Kriek, M., Skelton, R. E., Patel, S., Schmidt, K. B., Bezanson, R., Bian, F., da Cunha, E., **Erb, D. K.**, Fan, X., Förster Schreiber, N., Illingworth, G. D., Labbé, I., Lundgren, B., Magee, D., Marchesini, D., McCarthy, P., Muzzin, A., Quadri, R., Steidel, C. C., Tal, T., Wake, D., Whitaker, K. E., & Williams, A. 2011, *Astrophysical Journal Letters*, 743, L15
50. "Filamentary Large-scale Structure Traced by Six Ly α Blobs at $z=2.3$." **Erb, D. K.**, Bogosavljević, M., & Steidel, C. C. 2011, *Astrophysical Journal Letters*, 740, L31
49. "Constraints on the Assembly and Dynamics of Galaxies. II. Properties of Kiloparsec-scale Clumps in Rest-frame Optical Emission of $z \sim 2$ Star-forming Galaxies." Förster Schreiber, N. M., Shapley, A. E., Genzel, R., Bouché, N., Cresci, G., Davies, R., **Erb, D. K.**, Genel, S., Lutz, D., Newman, S., Shapiro, K. L., Steidel, C. C., Sternberg, A., & Tacconi, L. J. 2011, *Astrophysical Journal*, 739, 45
48. "Diffuse Ly α Emitting Halos: A Generic Property of High-redshift Star-forming Galaxies." Steidel, C. C., Bogosavljević, M., Shapley, A. E., Kollmeier, J. A., Reddy, N. A., **Erb, D. K.**, & Pettini, M. 2011, *Astrophysical Journal*, 736, 160
47. "Constraints on the Assembly and Dynamics of Galaxies. I. Detailed Rest-frame Optical Morphologies on Kiloparsec Scale of $z \sim 2$ Star-forming Galaxies." Förster Schreiber, N. M., Shapley, A. E., **Erb, D. K.**, Genzel, R., Steidel, C. C., Bouché, N., Cresci, G., & Davies, R. 2011, *Astrophysical Journal*, 731, 65
46. "Excess AGN activity in the $z=2.30$ Protocluster in HS 1700+64." Digby-North, J. A., Nandra, K., Laird, E. S., Steidel, C. C., Georgakakis, A., Bogosavljević, M., **Erb, D. K.**, Shapley, A. E., Reddy, N. A., & Aird, J. 2010, *Monthly Notices of the Royal Astronomical Society*, 407, 846
45. "Physical Conditions in a Young, Unreddened, Low-metallicity Galaxy at High Redshift." **Erb, D. K.**, Pettini, M., Shapley, A. E., Steidel, C. C., Law, D. R., & Reddy, N. A. 2010, *Astrophysical Journal*, 719, 1168
44. "The Structure and Kinematics of the Circumgalactic Medium from Far-ultraviolet Spectra of $z \sim 2-3$ Galaxies." Steidel, C. C., **Erb, D. K.**, Shapley, A. E., Pettini, M., Reddy, N., Bogosavljević, M., Rudie, G. C., & Rakic, O. 2010, *Astrophysical Journal*, 717, 289
43. "Dust Obscuration and Metallicity at High Redshift: New Inferences from UV, H α , and 8 μ m Observations of $z \sim 2$ Star-forming Galaxies." Reddy, N. A., **Erb, D. K.**, Pettini, M., Steidel, C. C., & Shapley, A. E. 2010, *Astrophysical Journal*, 712, 1070
42. "The Relationship between Stellar Populations and Ly α Emission in Lyman Break Galaxies." Kornei, K. A., Shapley, A. E., **Erb, D. K.**, Steidel, C. C., Reddy, N. A., Pettini, M., & Bogosavljević, M. 2010, *Astrophysical Journal*, 711, 693
41. "The SINS Survey: SINFONI Integral Field Spectroscopy of $z \sim 2$ Star-forming Galaxies." Förster Schreiber, N. M., Genzel, R., Bouché, N., Cresci, G., Davies, R., Buschkamp, P., Shapiro, K., Tacconi, L. J., Hicks, E. K. S., Genel, S., Shapley, A. E., **Erb, D. K.**, Steidel, C. C., Lutz, D., Eisenhauer, F., Gillessen, S., Sternberg, A., Renzini, A., Cimatti, A., Daddi, E., Kurk, J., Lilly, S., Kong, X., Lehnert, M. D., Nesvadba, N., Verma, A., McCracken, H., Arimoto, N., Mignoli, M., & Onodera, M. 2009, *Astrophysical Journal*, 706, 1364
40. "The SINS Survey: Broad Emission Lines in High-Redshift Star-Forming Galaxies." Shapiro, K. L., Genzel, R., Quataert, E., Förster Schreiber, N. M., Davies, R., Tacconi, L., Armus, L., Bouché, N., Buschkamp, P., Cimatti, A., Cresci, G., Daddi, E., Eisenhauer, F., **Erb, D. K.**, Genel, S., Hicks, E. K. S., Lilly, S. J., Lutz, D., Renzini, A., Shapley, A., Steidel, C. C., & Sternberg, A. 2009, *Astrophysical Journal*, 701, 955
39. "Dynamics of Galactic Disks and Mergers at $z \sim 1.6$: Spatially Resolved Spectroscopy with Keck Laser Guide Star Adaptive Optics." Wright, S. A., Larkin, J. E., Law, D. R., Steidel, C. C., Shapley, A. E., & **Erb, D. K.** 2009, *Astrophysical Journal*, 699, 421
38. "The Kiloparsec-scale Kinematics of High-redshift Star-forming Galaxies." Law, D. R., Steidel, C. C., **Erb, D. K.**, Larkin, J. E., Pettini, M., Shapley, A. E., & Wright, S. A. 2009, *Astrophysical Journal*, 697, 2057
37. "The SINS Survey: Modeling the Dynamics of $z \sim 2$ Galaxies and the High- z Tully-Fisher Relation." Cresci, G., Hicks, E. K. S., Genzel, R., Schreiber, N. M. F., Davies, R., Bouché, N., Buschkamp, P., Genel, S., Shapiro, K., Tacconi, L., Sommer-Larsen, J., Burkert, A., Eisenhauer, F., Gerhard, O., Lutz, D., Naab, T., Sternberg, A., Cimatti, A., Daddi, E., **Erb, D. K.**, Kurk, J., Lilly, S. L., Renzini, A., Shapley, A., Steidel, C. C., & Caputi, K. 2009, *Astrophysical Journal*, 697, 115
36. "From Rings to Bulges: Evidence for Rapid Secular Galaxy Evolution at $z \sim 2$ from Integral Field Spectroscopy in the SINS Survey." Genzel, R., Burkert, A., Bouché, N., Cresci, G., Förster Schreiber, N. M., Shapley, A., Shapiro, K., Tacconi, L. J., Buschkamp, P., Cimatti, A., Daddi, E., Davies, R., Eisenhauer, F., **Erb, D. K.**, Genel, S., Gerhard, O., Hicks, E., Lutz, D., Naab, T., Ott, T., Rabien, S., Renzini, A., Steidel, C. C., Sternberg, A., & Lilly, S. J. 2008, *Astrophysical Journal*, 687, 59
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