Daniel A. Goldstein

Address & Personal Data	501 Campbell Hall #3411 Department of Astronomy University of California, Berkeley Berkeley, CA, USA, 94720-3411	E-mail: dgold@berkeley.edu Born September 1991 US Citizen

Education

PhD, Astrophysics (expected May 2018) — 2014 – Present
Department of Astronomy, UC Berkeley
Advisors: Peter Nugent, Dan Kasen
Thesis: Cosmology with Strongly Lensed Supernovae

MA, Astrophysics — 2013 – 2014
Department of Astronomy, UC Berkeley

Bachelor of Arts with Distinction in Physics — 2009 – 2013
Summa Cum Laude, Phi Beta Kappa
University of Pennsylvania
Advisor: Masao Sako

Research Interests

1. Measuring H_0 with time delays from strongly lensed Type Ia supernovae
2. Detecting shock breakout from strongly lensed core-collapse supernovae
3. Studying dark energy with Type Ia supernova distances and lensing time delays
4. Modeling supernovae from explosion to emission to observation
5. Searching for Planet Nine in the outer solar system

Awards

Trumpler Award for Graduate Student Excellence (Berkeley Astronomy Dept.)	2017
Outstanding Graduate Student Instructor Award (Berkeley)	2015
NSF Graduate Research Fellowship Honorable Mention	2015

Professional Activities and Service

Co-Chair, LSST-DESC Strong Lensing Working Group	2017 (Incoming)
Graduate Student Representative to the Faculty Search	2016 – 2017
Outcome: Hired Jessica Lu and Courtney Dressing	
Builder, Dark Energy Survey	2015 – present

Teaching

Graduate Student Instructor, Astronomy 7B (Intro to Astrophysics)	Spring 2014
Graduate Student Instructor, Astronomy C12 (The Planets)	Fall 2013
Student, Astronomy 375 (Astronomy Pedagogy)	Fall 2013

Grants

Co-I, Royal Society International Exchanges Grant	£12,000

Students Advised

Austin McDowell (UC Berkeley undergrad; now grad at NYU)	Summer 2017
Sarafina Nance (UC Berkeley grad)	Fall 2017 – present
Pranav Sivakumar (UC Berkeley undergrad)	Fall 2017 – present

Publications (N=51, Published in or Submitted to Refereed Journals=50, h-index=15, Citations=900, Circulars=73)

First Author (Refereed)

4. "Evidence for Sub-Chandrasekhar Mass Type Ia Supernovae from a Comprehensive Survey of Radiative Transfer Models," **D. A. Goldstein** & D. Kasen ApJL (in review) (2017)
3. "Precise Time Delays from Chromatically Microlensed Type Ia Supernovae," **D. A. Goldstein**, P. E. Nugent, D. Kasen, & T. E. Collett, ApJ (in review) arXiv:1708.00003 (2017)
2. "How to Find Gravitationally Lensed Type Ia Supernovae," **D. A. Goldstein**

& P. E. Nugent ApJL, 834, L5 (2017)

1. "Automated Transient Identification in the Dark Energy Survey," **D. A. Goldstein**, C. B. D'Andrea, J. A. Fischer, R. J. Foley, R. R. Gupta, and 62 others AJ, 150, 82 (2015)

Contributing Author (Refereed)

46. "Models of the strongly lensed quasar DES J0408-5354," A. Agnello, H. Lin, L. Buckley-Geer, T. Treu, V. Bonvin, and 81 others including **D. A. Goldstein** MNRAS, 472, 4038-4050 (2017)

45. "OzDES multifibre spectroscopy for the Dark Energy Survey: 3-yr results and first data release," M. J. Childress, C. Lidman, T. M. Davis, B. E. Tucker, J. Asorey, and 96 others including **D. A. Goldstein** MNRAS, 472, 273-288 (2017)

44. "DES15E2mlf: a spectroscopically confirmed superluminous supernova that exploded 3.5 Gyr after the big bang," Y.-C. Pan, R. J. Foley, M. Smith, L. Galbany, C. B. D'Andrea, and 61 others including **D. A. Goldstein** MNRAS, 470, 4241-4250 (2017)

43. "A gravitational-wave standard siren measurement of the Hubble constant," B. P. Abbott, R. Abbott, T. D. Abbott, F. Acernese, K. Ackley, and 1299 others including **D. A. Goldstein** Nature (in press) arXiv:1710.05835 (2017)

42. "The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. II. UV, Optical, and Near-infrared Light Curves and Comparison to Kilonova Models," P. S. Cowperthwaite, E. Berger, V. A. Villar, B. D. Metzger, M. Nicholl, and 139 others including **D. A. Goldstein** ApJL, 848, L17 (2017)

41. "The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. I. Discovery of the Optical Counterpart Using the Dark Energy Camera," M. Soares-Santos, D. E. Holz, J. Annis, R. Chornock, K. Herner, and 142 others including **D. A. Goldstein** ApJL, 848, L16 (2017)

40. "Multi-messenger Observations of a Binary Neutron Star Merger," B. P. Abbott, R. Abbott, T. D. Abbott, F. Acernese, K. Ackley, and 3668 others including **D. A. Goldstein** ApJL, 848, L12 (2017)

39. "Dark Energy Survey Year 1 Results: Cross-Correlation Redshifts - Methods and Systematics Characterization," M. Gatti, P. Vielzeuf, C. Davis, R. Cawthon, M. M. Rau, and 102 others including **D. A. Goldstein** MNRAS (submitted) arXiv1709.00992 (2017)

38. "The DES Bright Arcs Survey: Hundreds of Candidate Strongly Lensed Galaxy Systems from the Dark Energy Survey Science Verification and Year 1 Observations," H. T. Diehl, E. J. Buckley-Geer, K. A. Lindgren, B. Nord, H. Gaitsch, and 74 others including **D. A. Goldstein** ApJS, 232, 15 (2017)

37. "Dark Energy Survey Year 1 Results: Cosmological Constraints from Cosmic Shear," M. A. Troxel, N. MacCrann, J. Zuntz, T. F. Eifler, E. Krause, and 130 others including **D. A. Goldstein** PRD (in review) arXiv1708.01538 (2017)

36. "Dark Energy Survey Year 1 Results: Galaxy-Galaxy Lensing," J. Prat, C. Sánchez, Y. Fang, D. Gruen, J. Elvin-Poole, and 110 others including **D. A. Goldstein** PRD (in review) arXiv1708.01537 (2017)

35. "Dark Energy Survey Year 1 Results: Redshift distributions of the weak lensing source galaxies," B. Hoyle, D. Gruen, G. M. Bernstein, M. M. Rau, J. De Vicente, and 133 others including **D. A. Goldstein** MNRAS (in review) arXiv1708.01532 (2017)

34. "Dark Energy Survey Year 1 Results: Cosmological Constraints from Galaxy Clustering and Weak Lensing," DES Collaboration, T. M. C. Abbott, F. B. Abdalla, A. Alarcon, J. Aleksić, and 195 others including **D. A. Goldstein** PRD (in review) arXiv1708.01530 (2017)

33. "Eight new luminous $z \geq 6$ quasars discovered via SED model fitting of VISTA, WISE and Dark Energy Survey Year 1 observations," S. L. Reed, R. G. McMahon, P. Martini, M. Banerji, M. Auger, and 58 others including **D. A. Goldstein** MNRAS, 468, 4702-4718 (2017)

32. "Core or Cusps: The Central Dark Matter Profile of a Strong Lensing Cluster with a Bright Central Image at Redshift 1," T. E. Collett, E. Buckley-Geer, H. Lin, D. Bacon, R. C. Nichol, and 56 others including **D. A. Goldstein** ApJ, 843, 148 (2017)

31. "The Dark Energy Survey view of the Sagittarius stream: discovery of two faint stellar system candidates," E. Luque, A. Pieres, B. Santiago, B. Yanny, A. K. Vivas, and 61 others including **D. A. Goldstein** MNRAS, 468, 97-108 (2017)

30. "COSMOGRAIL XVI: Time delays for the quadruply imaged quasar DES J0408-5354 with high-cadence photometric monitoring," F. Courbin, V. Bonvin, E. Buckley-Geer, C. D. Fassnacht, J. Frieman, and 72 others including **D. A. Goldstein** A&A (accepted) arXiv1706.09424 (2017)

29. "Real-time Recovery Efficiencies and Performance of the Palomar Transient Factory's Transient Discovery Pipeline," C. Frohmaier, M. Sullivan, P. E. Nugent, **D. A. Goldstein**, & J. DeRose ApJS, 230, 4 (2017)

28. "Discovery and Physical Characterization of a Large Scattered Disk Object at 92 au," D. W. Gerdes, M. Sako, S. Hamilton, K. Zhang, T. Khain, and 64 others including **D. A. Goldstein** ApJL, 839, L15 (2017)

27. "Discovery of the Lensed Quasar System DES J0408-5354," H. Lin, E. Buckley-Geer, A. Agnello, F. Ostrovski, R. G. McMahon, and 77 others including **D. A. Goldstein** ApJL, 838, L15 (2017)

26. "VDES J2325-5229 a $z = 2.7$ gravitationally lensed quasar discovered using morphology-independent supervised machine learning," F. Ostrovski, R. G. McMahon, A. J. Connolly, C. A. Lemon, M. W. Auger, and 54 others including **D. A. Goldstein** MNRAS, 465, 4325-4334 (2017)

25. "Imprint of DES superstructures on the cosmic microwave background," A. Kovács, C. Sánchez, J. García-Bellido, S. Nadathur, R. Crittenden, and 59 others including **D. A. Goldstein** MNRAS, 465, 4166-4179 (2017)

24. "Inference from the small scales of cosmic shear with current and future Dark Energy Survey data," N. MacCrann, J. Aleksić, A. Amara, S. L. Bridle, C. Bruderer, and 60 others including **D. A. Goldstein** MNRAS, 465, 2567-2583 (2017)

23. "The evolution of active galactic nuclei in clusters of galaxies from the Dark Energy Survey," E. Bufanda, D. Hollowood, T. E. Jeltema, E. S. Rykoff, E. Rozo, and 52 others including **D. A. Goldstein** MNRAS, 465, 2531-2539 (2017)

22. "Nearest Neighbor: The Low-mass Milky Way Satellite Tucana III," J. D. Simon, T. S. Li, A. Drlica-Wagner, K. Bechtol, J. L. Marshall, and 55 others including **D. A. Goldstein** ApJ, 838, 11 (2017)

21. "Farthest Neighbor: The Distant Milky Way Satellite Eridanus II," T. S. Li, J. D. Simon, A. Drlica-Wagner, K. Bechtol, M. Y. Wang, and 55 others including **D. A. Goldstein** ApJ, 838, 8 (2017)

20. "A Search for Kilonovae in the Dark Energy Survey," Z. Doctor, R. Kessler, H. Y. Chen, B. Farr, D. A. Finley, and 67 others including **D. A. Goldstein** ApJ, 837, 57 (2017)

19. "A Study of Quasar Selection in the Supernova Fields of the Dark Energy Survey," S. S. Tie, P. Martini, D. Mudd, F. Ostrovski, S. L. Reed, and 73 others including **D. A. Goldstein** AJ, 153, 107 (2017)

18. "Searching for Dark Matter Annihilation in Recently Discovered Milky Way Satellites with Fermi-Lat," A. Albert, B. Anderson, K. Bechtol, A. Drlica-Wagner, M. Meyer, and 68 others including **D. A. Goldstein** ApJ, 834, 110 (2017)

17. "Cosmology constraints from shear peak statistics in Dark Energy Survey Science Verification data," T. Kacprzak, D. Kirk, O. Friedrich, A. Amara, A. Refregier, and 83 others including **D. A. Goldstein** MNRAS, 463, 3653-3673 (2016)

16. "Comparing Dark Energy Survey and HST-CLASH observations of the galaxy cluster RXC J2248.7-4431: implications for stellar mass versus dark matter," A. Palmese, O. Lahav, M. Banerji, D. Gruen, S. Jouvel, and 64 others including **D. A. Goldstein** MNRAS, 463, 1486-1499 (2016)

15. "Host Galaxy Identification for Supernova Surveys," R. R. Gupta, S. Kuhlmann, E. Kovacs, H. Spinka, R. Kessler, and 55 others including **D. A. Goldstein** AJ, 152, 154 (2016)

14. "The Dark Energy Survey: more than dark energy - an overview," Dark Energy Survey Collaboration, T. Abbott, F. B. Abdalla, J. Aleksić, S. Allam, and 136 others including **D. A. Goldstein** MNRAS, 460, 1270-1299 (2016)

13. "A DECam Search for an Optical Counterpart to the LIGO Gravitational-wave Event GW151226," P. S. Cowperthwaite, E. Berger, M. Soares-Santos, J. Annis, D. Brout, and 96 others including **D. A. Goldstein** ApJL, 826, L29 (2016)

12. "Galaxy bias from the Dark Energy Survey Science Verification data: combining galaxy density maps and weak lensing maps," C. Chang, A. Pujol, E. Gaztañaga, A. Amara, A. Réfrégier, and 78 others including **D. A. Goldstein** MNRAS, 459, 3203-3216 (2016)

11. "Supplement: "Localization and Broadband Follow-up of the Gravitational-wave Transient GW150914" (2016, ApJL, 826, L13)," B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, and 6 others including **D. A. Goldstein** ApJS, 225, 8 (2016)

10. "Localization and Broadband Follow-up of the Gravitational-wave Transient GW150914," B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, and 6 others including **D. A. Goldstein** ApJL, 826, L13 (2016)

9. "Cross-correlation of gravitational lensing from DES Science Verification data with SPT and Planck lensing," D. Kirk, Y. Omori, A. Benoit-Lévy, R. Cawthon, C. Chang, and 87 others including **D. A. Goldstein** MNRAS, 459, 21-34 (2016)

8. "A Dark Energy Camera Search for Missing Supergiants in the LMC after the Advanced LIGO Gravitational-wave Event GW150914," J. Annis, M. Soares-Santos, E. Berger, D. Brout, H. Chen, and 104 others including **D. A. Goldstein** ApJL, 823, L34 (2016)

7. "A Dark Energy Camera Search for an Optical Counterpart to the First Advanced LIGO Gravitational Wave Event GW150914," M. Soares-Santos, R. Kessler, E. Berger, J. Annis, D. Brout, and 111 others including **D. A. Goldstein** ApJL, 823, L33 (2016)

6. "Assessment of Systematic Chromatic Errors that Impact Sub-1% Photometric Precision in Large-area Sky Surveys," T. S. Li, D. L. DePoy, J. L. Marshall, D. Tucker, R. Kessler, and 67 others including **D. A. Goldstein** AJ, 151, 157 (2016)

5. "The RedMaPPer Galaxy Cluster Catalog From DES Science Verification Data," E. S. Rykoff, E. Rozo, D. Hollowood, A. Bermeo-Hernandez, T. Jeltema, and 85 others including **D. A. Goldstein** ApJS, 224, 1 (2016)

4. "DES14X3taz: A Type I Superluminous Supernova Showing a Luminous, Rapidly Cooling Initial Pre-peak Bump," M. Smith, M. Sullivan, C. B. D'Andrea, F. J. Castander, R. Casas, and 80 others including **D. A. Goldstein** ApJL, 818, L8 (2016)

3. "The Difference Imaging Pipeline for the Transient Search in the Dark Energy Survey," R. Kessler, J. Marriner, M. Childress, R. Covarrubias, C. B. D'Andrea, and 62 others including **D. A. Goldstein** AJ, 150, 172 (2015)

2. "Observation of Two New L4 Neptune Trojans in the Dark Energy Survey Supernova Fields," D. W. Gerdes, R. J. Jennings, G. M. Bernstein, M. Sako, F. Adams, and 62 others including **D. A. Goldstein** AJ, 151, 39 (2016)

1. "DES13S2cmm: the first superluminous supernova from the Dark Energy Survey," A. Papadopoulos, C. B. D'Andrea, M. Sullivan, R. C. Nichol, K. Barbary, and 64 others including **D. A. Goldstein** MNRAS, 449, 1215-1227 (2015)

Non-refereed

1. "The dark energy survey and operations: years 1 to 3," H. T. Diehl, E. Neilsen, R. Gruendl, B. Yanny, T. M. C. Abbott, and 113 others including **D. A. Goldstein** Proc. SPIE, 9910, 99101D (2016)

Talks

Invited Conference Talks

2. "Connecting Radiative Transfer Simulations to Supernova Data in the Era of LSST," Big Data in Astronomy, Tel Aviv University, December 2015.

1. "Using Machine Learning for Discovery in DES SN Imaging," Plenary Talk, Dark Energy Survey International Collaboration Meeting IX., University of Sussex, Brighton, UK, October 2014.

Invited Colloquia and Seminars

2. "Strongly Lensed Supernovae," Astronomy Tea Talk, Caltech, September 25, 2017.

1. "Precise Time Delays from Strongly Lensed Type Ia Supernovae," Explosive Astrophysics Seminar, UC Berkeley, March 22, 2017.

Contributed Talks

3. "Microlensing of Strongly Lensed Supernovae," Astronomy Department Lunch Talk, UC Berkeley, August 31, 2017.

2. "What Can We Learn from a Supernova We Can Anticipate?," LSST: The Supernova Revolution, Northwestern University, June 2, 2017.

1. "Strongly Lensed Supernova Cosmology," Astronomy Department Lunch Talk, UC Berkeley, January 19, 2017.

Selected Posters

2. "Supernova emulators: connecting massively parallel SN Ia radiative transfer simulations to data with Gaussian processes," **D. A. Goldstein**, R. C. Thomas, & D. Kasen, AAS 225, Seattle, WA, January 2015.

1. "Supernova emulators: connecting massively parallel SN Ia radiative transfer simulations to data with Gaussian processes," **D. A. Goldstein**, R. C. Thomas, & D. Kasen, Type Ia Supernovae: progenitors, explosions, and cosmology, University of Chicago, September 2014.

Observing Experience

DECam (∼25 nights)

Circulars

73. Muthukrishna, D., Sharp, R. G., Tucker, B. E., et al. 2017, The Astronomer's Telegram, 10759,

72. Sharp, R., Zhang, B., Sommer, N. E., et al. 2017, The Astronomer's Telegram, 9961,

71. Sullivan, M., Smith, M., Prajs, S., et al. 2017, The Astronomer's Telegram, 9953,

70. Hoormann, J. K., Asorey, J., Carollo, D., et al. 2016, The Astronomer's Telegram, 9855,

69. Mudd, D., Martini, P., Lewis, G. F., et al. 2016, The Astronomer's Telegram, 9742,

68. Galbany, L., D'Andrea, C., Prajs, S., et al. 2016, The Astronomer's Telegram, 9700,

67. O'Neill, C. R., Moller, A., Sommer, N. E., et al. 2016, The Astronomer's Telegram, 9636,

66. Pan, Y.-C., Foley, R. J., Smith, R. C., et al. 2016, The Astronomer's Telegram, 9633,

65. Cawthon, R., Das, R., Schubnell, M., et al. 2016, Minor Planet Electronic Circulars, 2016-S17,

64. King, A., Moller, A., Sommer, N. E., et al. 2016, The Astronomer's Telegram, 9570,

63. Challis, P., Kirshner, R., Mandel, K., et al. 2016, The Astronomer's Telegram, 9505,

62. Sommer, N., Tucker, B. E., Moller, A., et al. 2016, The Astronomer's Telegram, 9504,

61. Pan, Y.-C., Foley, R. J., Barbary, K., et al. 2016, The Astronomer's Telegram, 9490,

60. Casas, R., Castander, F. J., Ahn, E., et al. 2016, The Astronomer's Telegram, 9460,

59. Challis, P., Kirshner, R., Mandel, K., et al. 2016, The Astronomer's Telegram, 8954,

58. Challis, P., Kirshner, R., Mandel, K., et al. 2016, The Astronomer's Telegram, 8952,

57. Lasker, J., Kessler, R., Scolnic, D., et al. 2016, The Astronomer's Telegram, 8797,

56. Casas, R., Castander, F. J., Childress, M., et al. 2016, The Astronomer's Telegram, 8717,

55. Kasai, E., Bassett, B., Crawford, S., et al. 2016, The Astronomer's Telegram, 8707,

54. Moller, A., Tucker, B. E., Yuan, F., et al. 2016, The Astronomer's Telegram, 8673,

53. Galbany, L., Gonzalez-Gaitan, S., Smith, M., et al. 2016, The Astronomer's Telegram, 8658,

52. Casas, R., Castander, F. J., Brout, D. J., et al. 2016, The Astronomer's Telegram, 8627,

51. MacCrann, N., Eifler, T., Sanchez, E., et al. 2016, Minor Planet Electronic Circulars, 2016-A102,

50. Pan, Y.-C., Foley, R. J., Kessler, R., et al. 2016, The Astronomer's Telegram, 8564,

49. Graham, M. L., Shivvers, I., Filippenko, A. V., et al. 2016, The Astronomer's Telegram, 8538,

48. Yuan, F., Tucker, B. E., Lidman, C., et al. 2015, The Astronomer's Telegram, 8464,

47. Pan, Y.-C., Foley, R. J., Galbany, L., et al. 2015, The Astronomer's Telegram, 8460,

46. Casas, R., Castander, F. J., Desai, S., et al. 2015, The Astronomer's Telegram, 8451,

45. Pan, Y.-C., Foley, R. J., Desai, S., et al. 2015, The Astronomer's Telegram, 8424,

44. Graham, M. L., Filippenko, A. V., Nugent, P., et al. 2015, The Astronomer's Telegram, 8418,

43. Glazebrook, K., Amon, A., Lidman, C., et al. 2015, The Astronomer's Telegram, 8413,

42. Pan, Y.-C., Foley, R. J., Gupta, R., et al. 2015, The Astronomer's Telegram, 8371,

41. Davis, T. M., Kim, A. G., Macualay, E., et al. 2015, The Astronomer's Telegram, 8367,

40. Pan, Y.-C., Foley, R. J., Maartens, R., et al. 2015, The Astronomer's Telegram, 8269,

39. Kasai, E., Bassett, B., Crawford, S., et al. 2015, The Astronomer's Telegram, 8188,

38. Pan, Y.-C., Foley, R. J., Nichol, R., et al. 2015, The Astronomer's Telegram, 8186,

37. Graham, M. L., Filippenko, A. V., Nugent, P., et al. 2015, The Astronomer's Telegram, 8177,

36. Smith, M., Sullivan, M., Childress, M., et al. 2015, The Astronomer's Telegram, 8176,

35. Lewis, G. F., Mould, J., Lidman, C., et al. 2015, The Astronomer's Telegram, 8167,

34. Bassett, B., Kasai, E., Crawford, S., et al. 2015, The Astronomer's Telegram, 8164,

33. Tucker, B. E., Sharp, R., Yuan, F., et al. 2015, The Astronomer's Telegram, 8137,

32. D'Andrea, C., Smith, M., Sullivan, M., et al. 2015, The Astronomer's Telegram, 8092,

31. Graham, M. L., Zheng, W., Filippenko, A. V., et al. 2015, The Astronomer's Telegram, 8084,

30. Sullivan, M., Smith, M., D'Andrea, C., et al. 2015, The Astronomer's Telegram, 8079,

29. Kasai, E., Bassett, B., Crawford, S., et al. 2015, The Astronomer's Telegram, 7973,

28. Castander, F. J., Casas, R., Garcia-Alvarez, D., et al. 2015, The Astronomer's Telegram, 7199,

27. Castander, F. J., Casas, R., Garcia-Alvarez, D., et al. 2015, The Astronomer's Telegram, 7190,

26. Kasai, E., Bassett, B., Crawford, S., et al. 2015, The Astronomer's Telegram, 7031,

25. D'Andrea, C., Smith, M., Sullivan, M., et al. 2015, The Astronomer's Telegram, 7022,

24. Allam, S., Tucker, D., Wester, W., et al. 2015, The Astronomer's Telegram, 6938,

23. Parkinson, D., Zhang, B., Sharp, R., et al. 2015, The Astronomer's Telegram, 6932,

22. Blanchard, P. K., Challis, P., Drout, M., et al. 2015, The Astronomer's Telegram, 6891,

21. Foley, R. J., Blanchard, P. K., Challis, P., et al. 2015, The Astronomer's Telegram, 6877,

20. Challis, P., Avelino, A., Kirshner, R. P., et al. 2014, The Astronomer's Telegram, 6790,

19. Kuehn, K., Lidman, C., Martini, P., et al. 2014, The Astronomer's Telegram, 6789,

18. Davis, T. M., Yuan, F., Zhang, B., et al. 2014, The Astronomer's Telegram, 6679,

17. Challis, P., Kirshner, R., Desai, J. P. S., et al. 2014, The Astronomer's Telegram, 6672,

16. Graham, M. L., Zheng, W., Filippenko, A. V., et al. 2014, The Astronomer's Telegram, 6636,

15. Graham, M. L., Zheng, W., Filippenko, A. V., et al. 2014, The Astronomer's Telegram, 6635,

14. Challis, P., Avelino, A., Kirshner, R. P., et al. 2014, The Astronomer's Telegram, 6589,

13. Blake, C., Lidman, C., Martini, P., et al. 2014, The Astronomer's Telegram, 6561,

12. Graham, M. L., Zheng, W., Filippenko, A. V., et al. 2014, The Astronomer's Telegram, 6559,

11. Castander, F. J., Casas, R., Garcia-Alvarez, D., et al. 2014, The Astronomer's Telegram, 6549,

10. Graham, M. L., Kelly, P. L., Zheng, W., et al. 2014, The Astronomer's Telegram, 6531,

9. Yuan, F., Lidman, C., Davis, T. M., et al. 2014, The Astronomer's Telegram, 6520,

8. Smith, M., Sullivan, M., Mehner, A., et al. 2014, The Astronomer's Telegram, 6515,

7. Foley, R. J., D'Andrea, C., Nichol, R., et al. 2014, The Astronomer's Telegram, 5985,

6. Yuan, F., Childress, M., Sharp, R., et al. 2014, The Astronomer's Telegram, 5757,

5. Yuan, F., Childress, M., Sharp, R., et al. 2013, The Astronomer's Telegram, 5642,

4. Papadopoulos, A., Sullivan, M., D'Andrea, C., et al. 2013, The Astronomer's Telegram, 5603,

3. Childress, M., Sharp, R., Yuan, F., et al. 2013, The Astronomer's Telegram, 5568,

2. Smith, M., Bassett, B., Kasai, E., et al. 2013, The Astronomer's Telegram, 5548,

1. Smith, M., Okouma, P., Bassett, B., et al. 2013, The Astronomer's Telegram, 5463,