

Curriculum Vitae - Maria R. Drout

Hubble, Carnegie-Dunlap Postdoctoral Fellow
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PRIMARY RESEARCH INTERESTS

Unusual Astrophysical Transients	Core Collapse Supernovae
Massive Star Evolution	Mass Loss and Variability in Massive Stars

RESEARCH POSITIONS

NASA Hubble Postdoctoral Fellow, Carnegie Observatories	2016 – 2018
Associate Researcher, Dunlap Institute, University of Toronto	2016 – 2018
Research Assistant, Lowell Observatory	2008, 2010 – 2011
<i>Advisor:</i> Dr. Phil Massey	
<i>Topics:</i> Massive Star Evolution: Yellow and Red Supergiants of the Local Group	
Variability in the Upper HR-Diagram: Yellow Supergiants and LBVs	
Research Assistant, Harvard-Smithsonian Center for Astrophysics	2009
<i>Advisor:</i> Dr. Alicia Soderberg	
<i>Topics:</i> Explosion Properties and Progenitors of Type Ibc SN	
Research Assistant, University of Iowa	2007 – 2010
<i>Advisor:</i> Dr. Cornelia Lang	
<i>Topics:</i> Paschen Alpha and Radio Polarimetric Survey of the Galactic Center	
Radio Nebulae of Ultra-Luminous X-Ray Sources	

EDUCATION

Harvard University, Ph.D. Astrophysics	2016
<i>Advisor:</i> Dr. Edo Berger	
<i>Thesis Title:</i> Peculiar Transients as Probes of Stellar Evolution and Mass Loss	
Harvard University, M.A. Astrophysics	2013
University of Cambridge, Churchill College, M.A.St. Theoretical Physics	2011
Part III of the Mathematical Tripos	
University of Iowa, B.S. Summa Cum Laude with Honors, Physics and Astronomy	2010

SELECTED FELLOWSHIPS AND AWARDS

Dorothy Shoichet Women Faculty Award of Excellence, Univ. of Toronto	2018
ASU Origins Project Postdoctoral Lectureship Award	2018
NASA Hubble Fellowship, Carnegie Observatories	2016 - 2018
Fireman Award, Harvard Department of Astronomy	2016
Awarded to top PhD in Observational Astronomy	
Harvard University Graduate Merit Fellowship	2015
NSF Graduate Research Fellowship	2010-2014
Harvard University James Mills Pierce Graduate Fellowship	2011-2014
Churchill Fellowship	2010-2011
Goldwater Fellowship	2009-2010
University of Iowa Ernest R. Johnson Memorial Prize	2010
Awarded to graduating student with the highest academic standing	
James Van Allen Award, University of Iowa	2010
Society of Physics Students Outstanding Leadership Award	2010
Association of Women in Science Lorentzen Award	2010
Phi Beta Kappa Stevens Award	2010

PUBLICATIONS (see attached publication list; H-index: 33)

 Journal Publications: 7 first author, 54 Nth author

Other Publications: 6 conference proceedings, 2 white papers

PI GRANTS

 Hubble Fellowship Research Award HST-HF2-51373.001; **\$355,111**

 Chandra X-ray Observatory, Observing Grant 18500126; **\$85,870**
SUCCESSFUL PI PROPOSALS

 An APOGEE-2S Survey of Evolved Massive Stars in the Magellanic Clouds

- 3 nights; du Pont 2.5m with APOGEE-2S NIR spectrograph

Spectroscopy of Infant Supernovae and Rapid Transients Discovered by the KMTNet SN Project

- 9 hours; Gemini South 2017B

A Pilot Survey for Stripped Binary Stars in the LMC

- 3 nights; Magellan Clay 2017B, 2018A

X-rays as a probe of the progenitor of the Type Ia SN2017cbv

- 50 ks, *Chandra* DDT

Probing the Evolutionary History of “Non-Standard” SN Progenitors: SN2016gkg

- 16 hours, JVLA, DDT, 2017A,B

Transients as Probes of Stellar Evolution and Mass Loss

- 32 nights, Magellan Clay 2017A,B, 2018A du Pont 2.5m 2017A, B, 2018A,B

Yellow Supergiants as Probes of Stellar Evolution and Mass Loss

- 12 nights, Magellan Clay 2017A,B, du Pont 2.5m 2017B

 Chandra Observations of Extreme Mass Loss from the Progenitors of Luminous Type II_n SNe

- 150 ks, *Chandra* Cycle 18

 VLA Observations as Probes of Mass Loss From the Progenitors of Luminous Type II_n SNe

- 35 hours; JVLA, 2015B, 2016B, 2017A

Blasts from the Past: Resolving Ejecta Nebulae around LBVs in the Magellanic Clouds

- 3 nights; Magellan Baade 2014B

 PS1-MDS Type II_n SN: Do Explosion Properties Correlate with Host Galaxy Environment?

- 8 nights; MMT 2015A, MMT 2015C, Magellan Baade 2015A, Magellan Baade 2015B

Unveiling the Energy Source within Peculiar Core-Collapse SN

- 3 nights; MMT 2014A, MMT 2014B, MMT 2014C

ADVISING EXPERIENCE

Yvette Cendes (PhD; co-supervised with B. Gaensler)	2018 – present
Niloufar Afsari (PhD; co-supervised with C. Matzner; D.S. Moon)	2017 – present
Anna O’Grady (PhD; co-supervised with B. Gaensler)	2016 – present
Chris Ni (Undergraduate; co-supervised with D.S. Moon)	2016 – present
Shannon Brown (Undergraduate; co-supervised with D.S. Moon; J. Antoniadis)	2016-2017

TEACHING EXPERIENCE

Dunlap Institute Instrumentation Summer School; Lab Instructor	2017
Harvard University Certificate of Distinction in Teaching	2012, 2013
Center for Astronomy Education Teaching Certificate	2013
Astron-100 “An Introduction to Observational Astronomy”, Teaching Fellow	2013
SPU-19 “The Energetic Universe”, Teaching Fellow	2012
029:050 “Stars, Galaxies and the Universe”, Night Sky Telescope Guide	2007 - 2010

SERVICE

LSST Transients and Variable Star Working Group	2016 – present
• <i>Chair of Fast Transient Sub-group</i>	2017 – present
Scientific Organizing Committees:	
• Aspen Center for Physics: Astrophysics with gravitational-wave populations	2019
• 6 th Annual GMT Science Meeting: The Birth and Death of Stars	2018
Reviewer for <i>Nature</i> , <i>Nature Astronomy</i> , ApJ, ApJL, and MNRAS	2011 – present
University of Toronto Colloquium Committee	2017 – present
Student Representative on Harvard Astronomy Committee for Academic Studies	2012 – 2015

SELECTED ACADEMIC PRESENTATIONS***International Conference Presentations (12 invited talks, 15 contributed talks, 5 posters)***

European Week of Astronomy and Space Science (EWASS), <i>invited review talk</i>	April 2018
2018 NASA Hubble Symposium (STScI), <i>talk</i>	March 2018
231 st AAS Meeting, GW170817 Special Session, <i>invited review talk</i>	Jan 2018
231 st AAS Meeting, PanSTARRS Special Session, <i>invited talk</i>	Jan 2018
GW170817: Rapid Response Conference, (KITP, Santa Barbara), <i>invited review talk</i>	Dec 2017
IAU 338 Symposium on Gravitational Wave Astrophysics, (Baton Rouge, LA), <i>talk</i>	Oct 2017
Fifty One Ergs Supernovae Conference (U of Oregon), <i>invited review talk</i>	June 2017
Supernovae the LSST Revolution, (Northwestern), <i>invited review talk</i>	May 2017
The Inner Workings of Massive Stars (KITP, Santa Barbara), <i>talk</i>	April 2017
CSI Princeton, A Definitive Investigation of Cassiopeia A, <i>invited review talk</i>	March 2017
NASA Hubble Symposium 2017 (STScI), <i>talk</i>	March 2017
The Transient Universe with JWST, (Cambridge, MA), <i>invited participant</i>	Jan 2017
The Lives and Death Throes of Massive Stars, IAUS, (New Zealand), <i>talk</i>	Nov 2016
Supernovae Workshop, International Space Science Institute (Bern), <i>invited talk</i>	Oct 2016
Fellows at the Frontiers 2016 (CIERA, Northwestern University), <i>invited talk</i>	Sept 2016
Supernovae Through the Ages Conference (Easter Island), <i>talk</i>	Aug 2016
Sackler Conference in Theoretical Astrophysics (Cambridge, MA), <i>invited talk</i>	May 2016
227 th American Astronomical Society Meeting, <i>thesis talk</i>	Jan 2016
Fifty-One Ergs Supernovae Conference (Raleigh, NC), <i>talk</i>	June 2015
GMT Community Science Meeting on Transient Phenomena (D.C.), <i>talk</i>	Oct 2014
Supernovae in the Local Universe Conference (Coffs Harbour, Australia), <i>talk</i>	Aug 2014
Women in Aerospace and Astrospace Symposium (MIT), <i>invited talk</i>	Apr 2014
Fifty-One Ergs Supernovae Conference (Raleigh, NC), <i>talk</i>	May 2013
Cerro Tololo 50 th Anniversary Conference (La Serena, Chile), <i>invited talk</i>	May 2013
220 th American Astronomical Society Meeting, <i>poster</i>	Jan 2013
Illuminating the Universe Supernovae Workshop (Garching Germany), <i>talk</i>	Sept 2012
Massive Stars and GRBs Workshop (Aspen, CO), <i>talk</i>	June 2012
Gamma-Ray Bursts as Probes Conference (Lake Como, Italy), <i>talk</i>	May 2011
Galactic Center Workshop (Shanghai, China), <i>poster</i>	Oct 2009
2 nd Annual Midwest Conference for Undergraduate Women in Physics, <i>talk</i>	Jan 2009
213 th & 215 th American Astronomical Society Meeting, <i>poster</i>	Jan 2009, 2010
Bridging the Gap in Massive Star Evolution Conference (Caltech), <i>poster</i>	Nov 2008

Department Seminars/Colloquia (13 invited talks, 15 contributed talks):

Northwestern CIERA Astrophysics Seminar, <i>invited talk</i>	March 2018
UCLA Department of Astronomy & Earth, Planetary, and Space Sciences, <i>invited talks</i>	Feb 2018
University of Pittsburgh, Department of Physics & Astronomy, <i>invited talk</i>	Dec 2017
Las Cumbres Observatory Seminar, <i>invited talk</i>	Nov 2017
University of Toronto Colloquium, <i>invited talk</i>	Nov 2017
UC Santa Cruz Colloquium, <i>invited talk</i>	Oct 2017
Kavli Institute for Theoretical Physics Massive Star Reading Group, <i>talk</i>	Dec 2016
University of Hawaii Colloquium, <i>invited talk</i>	Dec 2016
Carnegie Supernova Project (CSP-II) Workshop, <i>talk</i>	Nov 2016
University of Toronto Colloquium, <i>talk</i>	Oct 2016
Lowell Observatory Colloquium, <i>invited talk</i>	Sept 2016
Ohio State CCAPP seminar, <i>invited talk</i>	Jan 2016
Carnegie Observatories Seminar, <i>talk</i>	Oct 2015

Caltech Astronomy Tea Talks, <i>talk</i>	Sept 2015
UC Santa Cruz FLASH seminar, <i>talk</i>	Sept 2015
UC Berkeley Theoretical Astrophysics Center Seminar, <i>invited talk</i>	Sept 2015
National Optical Astronomy Observatory FLASH seminar, <i>talk</i>	Sept 2015
Harvard-Smithsonian CfA Summer Colloquium Series, <i>invited talk</i>	July 2014
Harvard-Smithsonian CfA ITC Transient Series <i>invited talk</i>	Mar 2014
Kavli IPMU Supernovae Group Seminar (Tokyo Japan), <i>talk</i>	Aug 2012
Institute of Astronomy Stars Seminar (Cambridge UK), <i>talk</i>	Feb 2011
University of Iowa Astrophysics/Space Physics Seminar, <i>talk</i>	Sept 2009
Harvard-Smithsonian CfA REU Colloquia, <i>talk</i>	Aug 2009
Lowell Observatory REU Colloquia, <i>talk</i>	Aug 2008
U of Iowa Dep't of Physics and Astronomy REU Colloquia, <i>talk</i>	May 09, Sept. 08, May 08

SELECTED LEADERSHIP AND OUTREACH ACTIVITIES

<u>The Communicating Science Workshop (ComSciCon)</u>	2012 – present
• <i>Leadership Council</i>	2015 – present
• <i>Program Organizing Committee Chair</i>	2014 – 2015
• <i>National Workshop Organizing Committee</i>	2012 – 2015
A workshop series dedicated to providing graduate students in technical/scientific fields with the communication skills they will require for their future careers. We receive over 1000 applications for our annual national conference (see comscicon.com)	
<u>Astrobites.com, author and administrator</u>	2011 – present
• <i>Public Relations Committee Chair</i>	2012 – 2014
An on-line daily literature summary dedicated to making professional journal articles more accessible to undergraduates.	
<u>Society of Physics Students (Sigma Pi Sigma Chapter)</u>	2006 – 2010
• <i>President</i>	2008 – 2010
Coordinating social, professional, academic, and outreach activities for 100+ physics undergraduate students	
<u>The 10,000 Hours Show of Eastern Iowa</u>	2006 – 2010
• <i>Development Co-Chair</i>	2008 – 2009
Expanding 10K (an initiative to involve more students in community service) by putting greater emphasis on outreach activities.	
Astronomy on Tap, Presenter	2016 – 2018
Science from Scientists, Outreach Program	2013 – 2015
WISTEM mentor for undergraduates, Harvard University	2011 – 2015
Hawkeyes on Science Outreach Program	2007 – 2010
WISE mentor and ambassador, University of Iowa	2008 – 2010

PROFESSIONAL ORGANIZATIONS

American Astronomical Society	2009 – present
Phi Beta Kappa	2009 – present

OBSERVING EXPERIENCE

Optical Long-Slit Spectroscopy and Photometry	
• 63 nights; MMT 6.5m (Blue Channel, MMTCam), Magellan 6.5m (IMACS, LDSS3), du Pont 2.5m (WFCCD), MDM 2.4m, FLWO 1.5m	
Optical Echelle Spectrographs	
• 15 nights; Magellan 6.5m (MIKE, MagE), du Pont 2.5m (Echelle)	
Multi-fiber optical spectrographs	
• 8 nights; MMT Hectospec, CTIO Hydra	
NIR Spectroscopy and Photometry	
• 8 nights; Magellan 6.5m (FIRE; FourStar); du Pont 2.5m (APOGEE-2S)	

PUBLICATIONS (7 first author, 54 Nth author, 6 conference proceedings, 2 white papers)
H-index: 7 first author, 33 total **Citations: 438 first author, 2835 total**

First Author Journal Publications:

1. **Drout, M. R.**, Piro, A. L., et al., 2017, “Light Curves of the Neutron Star Merger GW170817/SSS17a: Implications for R-Process Nucleosynthesis”, *Science* [54 citations]
2. **Drout, M. R.**, Milisavljevic, D., et al., 2016, “The Double Peaked SN2013ge: a Type Ib/c SN with an Early Asymmetric Mass Ejection or Extended Progenitor Envelope”, *ApJ*, 821, 57 (24pp.) [17 citations]
3. **Drout, M. R.**, Chornock, R., et al., 2014, “Rapidly Evolving and Luminous Transients from PanSTARRS1”, *ApJ*, 794, 23 (23pp.) [58 citations]
4. **Drout, M. R.**, Soderberg, A. M., et al., 2013, “The Fast and Furious Decay of the Peculiar Type Ic Supernova 2005ek”, *ApJ*, 774, 58 (18pp.) [46 citations]
5. **Drout, M. R.**, Massey, P., & Meynet, G., 2012, “The Yellow and Red Supergiants of M33”, *ApJ*, 750, 97 (22pp.) [39 citations]
6. **Drout, M. R.**, Soderberg, A. M. et al., 2011, “The First Uniform and Statistical Survey of Type Ibc Supernovae Light-Curves”, *ApJ*, 741, 97 (20pp.) [180 citations]
7. **Drout, M. R.**, Massey, P., et al. 2009, “Yellow Supergiants in the Andromeda Galaxy (M31)”, *ApJ*, 703, 441-460 [43 citations]

Nth Author Journal Publications:

1. Soraisam, M. D., Bildsten, L., **Drout, M. R.** et al. 2018 “Variability of Red Supergiants in M31 from The Palomar Transient Factory”, *ApJ submitted*
2. Coppejans, D. L. et al. (*incl. Drout, M. R.*), 2018, “Jets in Hydrogen-poor Super-luminous Supernovae: Constraints from a Comprehensive Analysis of Radio Observations”, *ApJ submitted*
3. Margutti, R. et al. (*incl. Drout, M. R.*) 2018, “Results from a systematic survey of X-ray emission from Hydrogen-Poor Superluminous Supernovae”, *ApJ submitted*
4. Cowperthwaite, P. et al. (*incl. Drout, M. R.*) 2018, “An Empirical Study of Contamination in Wide-field Optical Follow-up of Gravitational Wave Events”, *ApJ submitted*
5. Scolnic, D. et al. (*incl. Drout, M. R.*), 2018, “The Complete Light-curve Sample of Spectroscopically Confirmed Type Ia Supernovae from Pan-STARRS1 and Cosmological Constraints from The Combined Pantheon Sample”, *ApJ submitted*
6. Kilpatrick, C., Foley, R., **Drout, M. R.** et al. 2018, “Connecting the progenitors, pre-explosion variability, and giant outbursts of luminous blue variables with Gaia16cfr”, *MNRAS*, 473, 4805-4823
7. Lunnan, R. et al. (*incl. Drout, M. R.*) 2018, “Hydrogen-Poor Superluminous Supernovae from the Pan-STARRS1 Medium Deep Survey” *ApJ*, 852, 81 (16pp.)
8. Shivvers, et al. (*incl. Drout, M. R.*) 2017, “The Nearby Type Ibn Supernova 2015G: Signatures of Asymmetry and Progenitor Constraints” *MNRAS*, 471, 4381-4397
9. Coulter, D. A. et al. (*incl. Drout, M. R.*), 2017, “Swope Supernova Survey 2017a (SSS17a), the Optical Counterpart to a Gravitational Wave Source”, *Science*,

10. Shappee, B. J., Simon, J. D., **Drout, M. R.** et al, 2017, “Early Spectra of the Gravitational Wave Source GW170817: Evolution of a Neutron Star Merger”, *Science*,
11. Kilpatrick, C. D., et al. (*incl. Drout, M. R.*), 2017, “Electromagnetic Evidence that SSS17a is the Result of a Binary Neutron Star Merger”, *Science*,
12. Murguia-Berthier, A. et al. (*incl. Drout, M. R.*), 2017 “A Neutron Star Binary Merger Model for GW170817/GRB 170817A/SSS17a”, *ApJL*, 848, 34 (8pp.)
13. Pan, Y.-C., et al. (*incl. Drout, M. R.*), 2017, “The Old Host-galaxy Environment of SSS17a, the First Electromagnetic Counterpart to a Gravitational-wave Source”, *ApJL*, 848, 30 (7pp.)
14. Siebert, M. R., Foley, R. J., **Drout, M. R.**, et al., 2017, “The Unprecedented Properties of the First Electromagnetic Counterpart to a Gravitational-wave Source”, *ApJL*, 848, 26 (6pp.)
15. Alexander, K. D., et al. (*incl. Drout, M. R.*), 2017, “The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. VI. Radio Constraints on a Relativistic Jet and Predictions for Late-time Emission from the Kilonova Ejecta”, *ApJL*, 848, 21 (7pp.)
16. Chornock, R. et al. (*incl. Drout, M. R.*), 2017, “The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. IV. Detection of Near-infrared Signatures of r-process Nucleosynthesis with Gemini-South”, *ApJL*, 848, 19 (7pp.)
17. Cowperthwaite, P. S. et al. (*incl. Drout, M. R.*), 2017, “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”, *ApJL*, 848, 17 (7pp.)
18. Soares-Santos, M. et al. (*incl. Drout, M. R.*), 2017, “The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. I. Discovery of the Optical Counterpart Using the Dark Energy Camera”, *ApJL*, 848, 16 (7pp.)
19. Abbott, B. P. et al. (*incl. Drout, M. R.*), 2017, “Multi-messenger Observations of a Binary Neutron Star Merger”, *ApJL*, 848, 12 (59pp.)
20. Abbott, B. P. et al. (*incl. Drout, M. R.*), 2017, “A gravitational-wave standard siren measurement of the Hubble constant”, *Nature*, 551, 85-88
21. Law, C, Milisavljevic, D. et al. (*incl. Drout, M. R.*) 2017, “TRES Survey of Variable Diffuse Interstellar Bands”, *MNRAS*, 470, 2835-2844
22. Milisavljevic, D. et al. (*incl. Drout, M. R.*) 2017, “iPTF15eqv: A Multi-Wavelength Expose of Calcium-Rich Transients”, *ApJ*, 846, 50 (19pp.)
23. Blanchard et al. (*incl. Drout, M. R.*) 2017, “PS16dtm: A Tidal Disruption Event in the Narrow-line Seyfert 1 Galaxy” *ApJ*, 843, 106 (22pp.)
24. Margutti, R. et al. (*incl. Drout, M. R.*) 2017, “X-Rays from the Location of the Double-humped Transient ASASSN-15lh”, *ApJ*, 836, 25 (13pp.)
25. Margutti, R. et al. (*incl. Drout, M. R.*) 2017, “Ejection of the massive Hydrogen-rich envelope timed with the collapse of the stripped SN2014C”, *ApJ*, 835, 140 (18pp)
26. Lunnan, R. et al. (*incl. Drout, M. R.*) 2016, “PS1-14bj: A Hydrogen-Poor Superluminous Supernova with a Long Rise and Slow Decay”, *ApJ*, 831, 144 (15pp.)
27. Cowperthwaite, P. S. et al. (*incl. Drout, M. R.*) 2016, “A DECam Search for an Optical Counterpart to the LIGO Gravitational Wave Event GW151226”, *ApJL*, 836, 29 (7pp.)

28. Abbott, B. P. et al. (*incl. Drout, M. R.*) 2016, “Localization and broadband follow-up of the gravitational-wave transient GW150914, *ApJL*, 826, 13 (8pp.)
29. Nicholl, M. et al. (*incl. Drout, M. R.*) 2016, “SN 2015bn: a detailed multi-wavelength view of a nearby superluminous supernova”, *ApJ*, 826, 39 (28pp.)
30. Annis, J. et al. (*incl. Drout, M. R.*) 2016, “A Dark Energy Camera Search for Missing Supergiants in the LMC After the Advanced LIGO Gravitational Wave Event GW150914”, *ApJ*, 923, 34
31. Soares-Santos, M. et al. (*incl. Drout, M. R.*) 2016, “A Dark Energy Camera Search for an Optical Counterpart to the First Advanced LIGO Gravitational Wave Event GW150914”, *ApJ* 823, 33
32. Milisavljevic et al. (*incl. Drout, M. R.*) 2015, “Metamorphosis of SN2014C: Delayed Interaction Between a Hydrogen Poor Core-Collapse Supernova and a Nearby Circumstellar Shell”, *ApJ*, 815, 120 (12pp.)
33. Maeda, K. et al. (*incl. Drout, M. R.*) 2015, “Type IIb SN2013df Entering into an Interaction Phase: A Link between the Progenitor and the Mass-loss, *ApJ*, 807, 35 (10pp.)
34. Lunnan, R. et al. (*incl. Drout, M. R.*) 2015, “Zooming in on the Progenitors of Superluminous Supernovae with HST”, *ApJ*, 804, 90 (11pp.)
35. Sanders, N. et al. (*incl. Drout, M. R.*) 2015, “Towards Characterization of the Type IIP SN Progenitor Population: a Statistical Sample of Light Curves from PS1”, *ApJ*, 799, 208 (23pp.)
36. Milisavljevic, D., et al. (*incl. Drout, M. R.*) 2014, “The Broad-lined Type Ic SN2012ap and the Nature of Relativistic Supernovae Lacking a Gamma-Ray Burst detection”, *ApJ*, 799, 51 (14pp.)
37. Margutti R, et al. (*incl. Drout, M. R.*) 2014, “Relativistic Supernovae have Shorter-lived Central Engines or More Extended Progenitors: the Case of SN2012ap”, *ApJ*, 797, 107 (8pp.)
38. Kamble, A., et al. (*incl. Drout, M. R.*) 2014, “Radio Observations Reveal a Smooth Circumstellar Environment Around the Extraordinary Type Ib SN2012au”, *ApJ*, 797, 2 (10pp.)
39. Scolnic, D., et al. (*incl. Drout, M. R.*) 2014, “Systematic Uncertainties Associated with the Cosmological Analysis of the First Pan-STARRS1 Type Ia Supernova Sample”, *ApJ*, 795, 45 (23pp.)
40. Rest, A., et al. (*incl. Drout, M. R.*) 2014, “Cosmological Constraints from Measurements of Type Ia Supernovae Discovered during the First 1.5 yr of the Pan-STARRS1 Survey”, *ApJ*, 795, 44 (34pp.)
41. Margutti, R., et al. (*incl. Drout, M. R.*) 2014, “No X-rays from the Very Nearby Type Ia SN 2014J: Constraints on Its Environment”, *ApJ*, 790, 52 (9pp.)
42. Lunnan, R., et al. (*incl. Drout, M. R.*) 2014, “Hydrogen-Poor Superluminous Supernovae and Long-duration Gamma-Ray Bursts have Similar Host Galaxies”, *ApJ*, 787, 138 (19pp.)
43. Milisavljevic, D., et al. (*incl. Drout, M. R.*) 2014, “Interaction between the Broad-lined Type Ic SN 2012ap and Carriers of Diffuse Interstellar Bands”, *ApJ*, 782, L5 (6pp.)
44. McCrum, M. et al. (*incl. Drout, M. R.*) 2014, “The superluminous supernova PS1-11ap: bridging the gap between low and high redshift”, *MNRAS*, 437, 656-674

45. Chornock, R., et al. (*incl* **Drout, M. R.**) 2014, “The Ultraviolet-bright, Slowly Declining Transient PS1-11af as a Partial Tidal Disruption Event”, *ApJ*, 780, 44 (20pp.)
46. Margutti, R. et al. (*incl* **Drout, M. R.**) 2014, “A Panchromatic View of the Restless SN2009ip Reveals the Explosive Ejection of a Massive Star Envelope”, *ApJ*, 780, 21 (38pp.)
47. Chornock, R., et al. (*incl* **Drout, M. R.**) 2013, “GRB 130606A as a Probe of the Intergalactic Medium and the Interstellar Medium in a Star-forming Galaxy in the First Gyr after the Big Bang”, *ApJ*, 774, 26 (10pp.)
48. Lunnan, R., et al. (*incl* **Drout, M. R.**) 2013, “PS1-10bzj: A Fast, H-poor Superluminous Supernova in a Metal-poor Host Galaxy”, *ApJ*, 771, 97 (13pp.)
49. Milisavljevic, D., et al. (*incl* **Drout, M. R.**) 2013, “SN 2012au: A Golden Link between Superluminous Supernovae and Their Lower-luminosity Counterparts”, *ApJL*, 770, 38 (6pp.)
50. Sanders, N. E., et al. (*incl* **Drout, M. R.**) 2013, “PS1-12sk is a Peculiar Supernova from a Herich Progenitor System in a Brightest Cluster Galaxy Environment”, *ApJ*, 769, 39 (15pp.)
51. Chornock, R., et al. (*incl* **Drout, M. R.**), 2013, “PS1-10afx at $z=1.388$: Pan-STARRS1 Discovery of a New Type of Superluminous Supernova”, *ApJ*, 767, 162 (16pp.)
52. Sanders, N. E., et al. (*incl* **Drout, M. R.**) 2012, “A Spectroscopic Study of Type Ibc Supernova Host Galaxies from Untargeted Surveys”, *ApJ*, 758, 132 (24pp.)
53. Berger, E. et al. (*incl* **Drout, M. R.**) 2012, “Ultraluminous Supernovae as a New Probe of the Interstellar Medium in Distant Galaxies”, *ApJ*, 755, 29 (6pp.)
54. Neugent, K. F., Massey, P., Skiff, B., **Drout, M. R.**, et al. 2010, “Yellow Supergiants in the Small Magellanic Cloud: Putting Evolutionary Theory to the Test”, *ApJ*, 719, 1784-1795

Conference Proceedings:

1. Massey, P. et al. (*incl* **Drout, M. R.**) 2017, “The Red Supergiant Content of the Local Group”
2. **Drout, M. R.**, Massey, P., 2015, “Evolved Massive Stars in the Local Group”, *ASPC*, 491, 307D
3. **Drout, M. R.**, Lang, C. C., 2011, “Isolated Massive Star Winds in the Galactic Center: Radio Counterparts to Paschen Alpha and X-ray Sources”, *ASPC*, 439, 123
4. Lang, C. C., **Drout, M. R.**, “The Galactic Center Magnetic Field on Smaller Scales: Multifrequency Observations of Nonthermal Filament Candidates”, *ASPC*, 439, 53
5. **Drout, M. R.**, Massey, P., 2010, “Filling the Yellow Void: A Census of F and G Supergiants in M31”, *ASPC*, 425, 51
6. Lang, C. C., **Drout, M. R.**, 2008, “The magnetic environment in the central region of nearby galaxies”, *JPhCS*, 131, 012032

White Papers:

1. “Enabling New ALMA Science with Improved Support for Time-Domain Observations”, submitted to ALMA Science Advisory Council; corresponding author P. K. G. Williams, arXiv:1703.04692
2. “A First Transients Survey with JWST: the FLARE Project”; corresponding author L. Wang, arXiv: 1710.07005