Curriculum Vitae - **Maria R. Drout**

Assistant Professor, Department of Astronomy and Astrophysics
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PRIMARY RESEARCH INTERSTS

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

RESEARCH POSITIONS

Assistant Professor, Department of Astronomy & Astrophysics, Univ. of Toronto	2018 –
NASA Hubble Postdoctoral Fellow, Carnegie Observatories	2016 – 2018
Associate Researcher, Dunlap Institute, University of Toronto	2016 – 2018
Research Assistant, Lowell Observatory	2008, 2010 – 2011
Advisor: Dr. Phil Massey	
Research Assistant, Harvard-Smithsonian Center for Astrophysics	2009
Advisor: Dr. Alicia Soderberg	
Research Assistant, University of Iowa	2007 – 2010
Advisor: Dr. Cornelia Lang	

EDUCATION

Harvard University, Ph.D. Astrophysics	2016
Advisor: Dr. Edo Berger	
Thesis Title: 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

CIFAR Azrieli Global Scholar, Canadian Institute for Advanced Research	2018
Dorothy Shoichet Women Faculty Award of Excellence, Univ. of Toronto	2018
Postdoctoral Innovation and Excellence Award, Carnegie Institution for Science	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: 41)

Journal Pubs: 7 first author, 64 Nth author. *Other:* 6 conference proceedings, 5 white papers

PI GRANTS/RESEARCH FUNDING

CIFAR Azrieli Global Scholar Award; **$100,000**
Hubble Fellowship Research Award HST-HF2-51373.001; **$355,111**
Chandra X-ray Observatory, Observing Grant 18500126; **$85,870**

SUCESSFUL PI PROPOSALS

Summary: 25 successful PI proposals for 13 distinct science programs. Allocated time to date: 72 nights on optical/infrared telescopes, 200ks on X-ray telescopes, 51 hours on radio telescopes.

Multimessenger Astrophysics: Gemini Monitoring of Optical/IR Counterparts to Gravitation Wave Events in LIGO/Virgo O3 *(PI of Canadian-wide Collaboration)*

- 24.8 hours Gemini N/S 2018B, 2019A

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

- 4 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 Survey for Stripped Binary Stars in the LMC

- 6 nights; Magellan Clay 2017B, 2018A, 2018B

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

- 33 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 IIn SNe

- 150 ks, *Chandra* Cycle 18

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

Doctorate:

Bethany Ludwig (principal supervisor)	2018 – present
Chris Ni (co-supervisor with D.S. Moon)	2018 – present
Yvette Cendes (co-supervisor with B. Gaensler)	2018 – present
Niloufar Afsari (co-supervisor with C. Matzner; D.S. Moon)	2017 – present
Anna O'Grady (co-supervisor with B. Gaensler)	2016 – present

Bachelor's Honours:

Chris Ni (co-supervisor with D.S. Moon)	2016 – 2018
Shannon Brown (co-supervisor with D.S. Moon; J. Antoniadis)	2016 – 2017

TEACHING EXPERIENCE

West African International Summer School for Young Astronomers; Lab Development 2018
- *Secured Competitive telescope time for students through the Las Cumbres Observatory Educational Partners Observing Program*

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

CASTOR (Wide-Field UV Survey Telescope) Science Maturation Study 2018 – present
- *Chair of the Time Domain Working Group*

LSST Transients and Variable Star Working Group 2016 – present
- *Chair of Fast Transient Sub-group* 2017 – present

Scientific Organizing Committees:
- Aspen Center for Physics: Astrophysics with gravitational-wave populations 2019
- 6th Annual GMT Science Meeting: The Birth and Death of Stars 2018

Reviewer for *Nature*, *Nature Astronomy*, ApJ, ApJL, and MNRAS 2011 – present
University of Toronto Dept of Astronomy, Graduate Curriculum Committee 2018 – present
University of Toronto Dept of Astronomy, Graduate Admissions Committee 2018 – present
University of Toronto Dept of Astornomy, Astro-ph Discussion Committee 2018 – present
University of Toronto Dept of Astronomy, Colloquium Committee 2017 – present
Student Representative on Harvard Astronomy Committee for Academic Studies 2012 – 2015

SELECTED ACADEMIC PRESENTATIONS

*International Conference Presentations (**18 invited talks, 16 contributed talks, 5 posters**)*

Astrophysics with Gravitational Wave Populations (Aspen), *talk* Feb 2019
Massive Stars and Supernova (Argentina), ***invited review talk*** Nov 2018
Chemistry is Out of this World, ACS Meeting (Pasadena, CA), ***invited keynote lecture*** Oct 2018
Canadian Wide-Field Astronomy Meeting (Waterloo), ***invited review talk*** Oct 2018
Time-Domain Astrophysics with Swift III (Clemson, SC), ***invited review talk*** Oct 2018
Unsolved Problems in Astrophysics and Cosmology (Budapest), ***invited review talk*** July 2018
Shocking Supernova Conference (Stockholm), ***invited review talk*** May 2018
European Week of Astronomy and Space Science (EWASS), ***invited review talk*** April 2018
2018 NASA Hubble Symposium (STScI), *talk* March 2018
231st AAS Meeting, GW170817 Special Session, ***invited review talk*** Jan 2018
231st AAS Meeting, PanSTARRS Special Session, ***invited talk*** Jan 2018
GW170817: Rapid Response Conference, (KITP, Santa Barbara), ***invited review talk*** Dec 2017
IAU 338 Symposium on Gravitational Wave Astrophysics, (Baton Rouge, LA), *talk* Oct 2017
Fifty One Ergs Supernovae Conference (U of Oregon), ***invited review talk*** June 2017
Supernovae the LSST Revolution, (Northwestern), ***invited review talk*** May 2017
The Inner Workings of Massive Stars (KITP, Santa Barbara), *talk* April 2017
CSI Princeton, A Definitive Investigation of Cassiopeia A, ***invited review talk*** March 2017
NASA Hubble Symposium 2017 (STScI), *talk* March 2017
The Transient Universe with JWST, (Cambridge, MA), *invited participant* Jan 2017
The Lives and Death Throes of Massive Stars, IAUS, (New Zealand), *talk* Nov 2016
Supernovae Workshop, International Space Science Institute (Bern), ***invited talk*** Oct 2016
Fellows at the Frontiers 2016 (CIERA, Northwestern University), ***invited talk*** Sept 2016
Supernovae Through the Ages Conference (Easter Island), *talk* Aug 2016
Sackler Conference in Theoretical Astrophysics (Cambridge, MA), ***invited talk*** May 2016
227th American Astronomical Society Meeting, *thesis talk* Jan 2016
Fifty-One Ergs Supernovae Conference (Raleigh, NC), *talk* June 2015
GMT Community Science Meeting on Transient Phenomena (D.C.), *talk* Oct 2014

Supernovae in the Local Universe Conference (Coffs Harbour, Australia), *talk*	Aug 2014
Women in Aerospace and Astrospace Symposium (MIT), ***invited talk***	Apr 2014
Fifty-One Ergs Supernovae Conference (Raleigh, NC), *talk*	May 2013
Cerro Tololo 50th Anniversary Conference (La Serena, Chile), ***invited talk***	May 2013
220th American Astronomical Society Meeting, *poster*	Jan 2013
Illuminating the Universe Supernovae Workshop (Garching Germany), *talk*	Sept 2012
Massive Stars and GRBs Workshop (Aspen, CO), *talk*	June 2012
Gamma-Ray Bursts as Probes Conference (Lake Como, Italy), *talk*	May 2011
Galactic Center Workshop (Shanghai, China), *poster*	Oct 2009
2nd Annual Midwest Conference for Undergraduate Women in Physics, *talk*	Jan 2009
213th & 215th American Astronomical Society Meeting, *poster*	Jan 2009, 2010
Bridging the Gap in Massive Star Evolution Conference (Caltech), *poster*	Nov 2008

*Department Seminars/Colloquia (**21 invited talks, 16 contributed talks**):*

University of West Virginia Physics Colloquium, ***invited talk***	Feb 2019
University of Iowa Physics Colloquium, ***invited talk***	Feb 2019
McGill Astrophysics Seminar, ***invited talk***	Nov 2018
Berkeley Astronomy Colloquium, ***invited talk***	Nov 2018
Arizona State University Origins Project Public Keynote Lecture, ***invited keynote lecture***	Oct 2018
Columbia Physics Department Colloquium, ***invited talk***	Oct 2018
ZTF Theory Meeting, KITP, Santa Barbara, *talk*	Aug 2018
Huntington Library Astronomy Lecture Series, ***invited talk***	May 2018
Northwestern CIERA Astrophysics Seminar, ***invited talk***	March 2018
UCLA Department of Astronomy, ***invited talk***	Feb 2018
UCLA Department of Earth, Planetary, and Space Sciences, ***invited talk***	Feb 2018
University of Pittsburgh, Department of Physics & Astronomy, ***invited talk***	Dec 2017
Las Cumbres Observatory Seminar, ***invited talk***	Nov 2017
Carnegie Observatories Colloquium, ***invited talk***	Nov 2017
University of Toronto Colloquium, ***invited talk***	Nov 2017
UC Santa Cruz Colloquium, ***invited talk***	Oct 2017
Kavli Institute for Theoretical Physics Massive Star Reading Group, *talk*	Dec 2016
University of Hawaii Colloquium, ***invited talk***	Dec 2016
Carnegie Supernova Project (CSP-II) Workshop, *talk*	Nov 2016
University of Toronto Colloquium, *talk*	Oct 2016
Lowell Observatory Colloquium, ***invited talk***	Sept 2016
Ohio State CCAPP seminar, ***invited talk***	Jan 2016
Carnegie Observatories Seminar, *talk*	Oct 2015
Caltech Astronomy Tea Talks, *talk*	Sept 2015
UC Santa Cruz FLASH seminar, *talk*	Sept 2015
UC Berkeley Theoretical Astrophysics Center Seminar, ***invited talk***	Sept 2015
National Optical Astronomy Observatory FLASH seminar, *talk*	Sept 2015
Harvard-Smithsonian CfA Summer Colloquium Series, ***invited talk***	July 2014
Harvard-Smithsonian CfA ITC Transient Series ***invited talk***	Mar 2014
Kavli IPMU Supernovae Group Seminar (Tokyo Japan), *talk*	Aug 2012
Institute of Astronomy Stars Seminar (Cambridge UK), *talk*	Feb 2011
University of Iowa Astrophysics/Space Physics Seminar, *talk*	Sept 2009
Harvard-Smithsonian CfA REU Colloquia, *talk*	Aug 2009
Lowell Observatory REU Colloquia, *talk*	Aug 2008
U of Iowa Dep't of Physics and Astronomy REU Colloquia, *talks*	May 09, Sept. 08, May 08

SELECTED LEADERSHIP AND OUTREACH ACTIVITIES

The Communicating Science Workshop (ComSciCon), Founding Member — 2012 – present

- *National Leadership Council* — 2015 – present
- *Canadian Expansion Organizing Committee* — 2018 – present
- *Program Organizing Committee Chair* — 2014 – 2015
- *National Workshop Organizing Committee* — 2012 – 2015

A workshop series dedicated to providing training for STEM graduate students in technical communication and empowering future leaders to share the results from their research to broad and diverse audiences. To date, we have we have held 35 events in 10 cities, raising more than

$800,000 to help us reach >1800 students. We are currently working to expand ComSciCon to Canada, with a first event scheduled for summer 2019. See comscicon.com.

Astrobites.com, Author and Administrator 2011 – present

- *Public Relations Committee Chair* 2012 – 2014
- *Daily Rotation Author (24 total articles published)* 2011 - 2013
  An on-line daily literature summary written by graduate students dedicated to making professional journal articles more accessible to undergraduates. As public relations chair, I oversaw verseeing the growth of the site into its current form: a self-sustaining website with >30 authors that reaches a diverse audience of >30,000 people per month in 153 countries.

Society of Physics Students (Sigma Pi Sigma Chapter) 2006 – 2010

- *President* 2008 – 2010

Coordinating social, professional, academic, and outreach activities for 100+ physics undergraduate students

The 10,000 Hours Show of Eastern Iowa 2006 – 2010

- *Development Co-Chair* 2008 – 2009
  Expanding 10K (an initiative to involve more students in community service) by putting greater emphasis on outreach activities.

CBC Quirks and Quarks Interview 2017
Astronomy on Tap, Presenter (Pasadena, Toronto, Santa Barbara) 2016 – present
Department of Physics Mentoring Program, University of Toronto 2018 – present
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

INTERNATIONAL COLLABORATIONS

Korean Microlensing Telescope Network Supernova Program (KSP) – Member 2016 – present
1 Meter 2 Hemisphere (1M2H) Gravitational Wave Follow-up – Member 2016 – present
Global Supernova Project (GSP) – Member 2016 – present
All Sky Automated Survey for Supernova (ASAS-SN) – External Collaborator 2016 – present
Intermediate Palomar Transient Factory (iPTF) – External Collaborator 2016 – present
LSST Transients and Variable Stars Working Group (TVS) – Member 2016 – present
Sloan Digital Sky Survey IV (SDSS-IV) – Member 2016 – present
Pan-STARRS1 (PS1) – Member 2011 – 2014

PROFESSIONAL ORGANIZATIONS

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

OBSERVING EXPERIENCE

Optical Long-Slit Spectroscopy and Photometry

- 65 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

- 16 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, 64 Nth author, 6 conference proceedings, 5 white papers)
H-index: 7 first author, 41 total Citations: 624 first author, 4960 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,* 358, 1570-1574 [158 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) [30 citations]
3. **Drout, M. R.**, Chornock, R., et al., 2014, "Rapidly Evolving and Luminous Transients from PanSTARRS1", ApJ, 794, 23 (23pp.) [83 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.) [61 citations]
5. **Drout, M. R.**, Massey, P., & Meynet, G., 2012, "The Yellow and Red Supergiants of M33", ApJ, 750, 97 (22pp.) [44 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.) [204 citations]
7. **Drout, M. R.,** Massey, P., et al. 2009, "Yellow Supergiants in the Andromeda Galaxy (M31)", ApJ, 703, 441-460 [44 citations]

Nth Author Journal Publications:

1. Aghakhanloo, M. et al. . (*incl.* **Drout, M. R.**), 2019, "Inferring the distance tto Westerlund 1 from Gaia DR2", *MNRAS submitted.*
2. Schmidt, S. J. et al. (*incl.* **Drout, M. R.**), 2018, "The largest M dwarfs flares from ASAS-SN", *ApJ submitted*
3. Smith, N. et al. (*incl.* **Drout, M. R.**), 2018, "On the Gaia DR2 distances for Galactic Luminous Blue Variables", *MNRAS submitted*
4. Margutti, R. et al. (*incl.* **Drout, M. R.**), 2019, "An embedded X-ray source shines through the aspherical AT2018cow: revealing the inner workings of the most luminous fast-evolving optical transients", *ApJ,* 872, 18
5. Aadland, E., Massey, P. Neugent, K, & **Drout, M. R.**, 2018, "Shedding Light on the Isolation of Luminous Blue Variables", *ApJ* 156, 294
6. Shappee, B., Holoein, T., **Drout, M. R.** et al., 2018, "Seeing Double: ASASSN-18bt Exhibits a Multi-Component Rise in the Early-Time K2 Light Curve", *ApJ,* 870, 13
7. Li et al. (*incl.* **Drout M. R.**), 2018, "Photometric and Spectroscopic Properties of Type Ia Supernova 2018oh with Early Excess Emission from the Kepler 2 Observations", *ApJ,* 870, 12
8. Dimitriadis et al. (*incl.* **Drout M. R.**), 2018, "K2 Observations of SN 2018oh Reveal a Two-Component Rising Light Curve for a Type Ia Supernova", *ApJ,* 870, 1
9. Margutti, R. et al. (*incl*. **Drout, M. R.**) 2018, "Results from a systematic survey of X-ray emission from Hydrogen-Poor Superluminous Supernovae", *ApJ*, 864, 45
10. Laskar, T. et al. (*incl*. **Drout, M. R.**) 2018, "First ALMA Light Curve Constrains Refreshed Reverse Shocks and Jet Magnetization in GRB 161219B", *ApJ*, 862, 94
11. Brown, S. et al. (*incl.* **Drout, M. R.**) 2018, "High-cadence Multi-color Observations of the Dwarf Nova KSP-OT-201503a by the KMTNet Supernova Program, *ApJ,* 860, 21
12. 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,* 859, 101

13. Soraisam, M. D., Bildsten, L., **Drout, M. R.** et al. 2018 "Variability of Red Supergiants in M31 from The Palomar Transient Factory", ApJ, 859, 18
14. 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, 858, 56
15. Coppejans, D. L. et al. (*incl.* **Drout, M. R.**), 2018, "Jets in Hydrogen-poor Super-luminous SN: Constraints from a Comprehensive Analysis of Radio Observations", ApJ, 856, 56
16. 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
17. Lunnan, R. et al. (*incl.* **Drout, M. R.**) 2018, "Hydrogen-Poor Superluminous Supernovae from the Pan-STARRS1 Medium Deep Survey" *ApJ,* 852, 81 (16pp.)
18. Shivvers, et al. (*incl.* **Drout, M. R.)** 2017, "The Nearby Type Ibn Supernova 2015G: Signatures of Asymmetry and Progenitor Constraints" *MNRAS,* 471, 4381-4397
19. Coulter, D. A. et al. (*incl.* **Drout, M. R.**), 2017, "Swope Supernova Survey 2017a (SSS17a), the Optical Counterpart to a Gravitational Wave Source", *Science,* 358, 1570
20. 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,* 358, 1583
21. Kilpatrick, C. D., et al. (*incl.* **Drout, M. R.**), 2017, "Electromagnetic Evidence that SSS17a is the Result of a Binary Neutron Star Merger", *Science,* 358, 1583
22. 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.)
23. 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.)
24. 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.)
25. 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.)
26. 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.)
27. 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.)
28. 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.)
29. Abbott, B. P. et al. (*incl.* **Drout, M. R.**), 2017, "Multi-messenger Observations of a Binary Neutron Star Merger", ApJL, 848, 12 (59pp.)
30. Abbott, B. P. et al. (*incl.* **Drout, M. R.**), 2017, "A gravitational-wave standard siren measurement of the Hubble constant", *Nature*, 551, 85-88
31. Law, C, Milisavljevic, D. et al. (*incl.* **Drout, M. R.)** 2017, "TRES Survey of Variable Diffuse Interstellar Bands", *MNRAS,* 470, 2835-2844
32. Milisavljevic, D. et al. (*incl.* **Drout, M. R.**) 2017, "iPTF15eqv: A Multi-Wavelength Expose of Calcium-Rich Transients", *ApJ,* 846, 50 (19pp.)

33. Blanchard et al. (*incl.* **Drout, M. R.)** 2017, "PS16dtm: A Tidal Disruption Event in the Narrow-line Seyfert 1 Galaxy" *ApJ,* 843, 106 (22pp.)
34. 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.)
35. 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)
36. 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.)
37. 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.)
38. 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.)*
39. 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.)*
40. Annis, J. et al. (*incl.* **Drout, M. R.**) 2016, "A Dark Energy Camera Search for Missing Supergiants in the LMC After A-LIGO Gravitational Wave Event GW150914", ApJ, 923, 34
41. Soares-Santos, M. et al. (*incl.* **Drout, M. R.**) 2016, "A Dark Energy Camera Search for an Optical Counterpart to the First A-LIGO Gravitational Wave Event GW150914", ApJ 823, 33
42. Milisavljevic et al. (*incl.* **Drout, M. R.**) 2015, "Metamorphosis of SN2014C: Delayed Interaction Between a H-Poor Core-Collapse Supernova and a Nearby Circumstellar Shell", ApJ, 815, 120 (12pp.)
43. 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.)
44. Lunnan, R. et al. (*incl* **Drout, M. R.**) 2015**,** "Zooming in on the Progenitors of Superluminous Supernovae with HST", ApJ, 804, 90 (11pp.)
45. 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.)
46. Milisavljevic, D., et al. (*incl* **Drout, M. R.**) 2014, "The Broad-lined Type Ic SN2012ap and the Nature of Relativistic SN Lacking a Gamma-Ray Burst detection", ApJ, 799, 51 (14pp.)
47. 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.)
48. Kamble, A., et al. (*incl* **Drout, M. R.**) 2014, "Radio Observations Reveal a Smooth Circumstellar Environment Around the Type Ib SN2012au", ApJ, 797, 2 (10pp.)
49. Scolnic, D., et al. (*incl.* **Drout, M. R.**) 2014, "Systematic Uncertainties Associated with the Cosmological Analysis of the First Pan-STARRS1 Type Ia SN Sample", ApJ, 795, 45 (23pp.)
50. 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.)
51. 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.)
52. 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.)
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