

# CURRICULUM VITAE

## RAGNHILD LUNNAN

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Oskar Klein Centre, Stockholm University  
AlbaNova University Center  
SE-10691 Stockholm, Sweden

phone: +46 (0)8 5537 8511  
e-mail: ragnhild.lunnan@astro.su.se  
web: <http://scholar.harvard.edu/rlunnan>

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### RESEARCH INTERESTS

Unusual transients; superluminous supernovae; supernova physics; time-domain astronomy; massive star evolution; star formation in dwarf galaxies; host galaxies; pair-instability supernovae; electromagnetic counterparts to gravitational waves.

### EDUCATION

**Harvard University**, Cambridge, Massachusetts, USA

**Ph.D.** Astronomy & Astrophysics (May 2015)

Adviser: Edo Berger

Thesis title: “The Properties and Environments of Superluminous Supernovae”

**A.M.** Astronomy (May 2011)

**Princeton University**, Princeton, New Jersey, USA

**A.B.** Astrophysical Sciences (June 2009), *magna cum laude*

Certificate in Applied and Computational Mathematics

### RESEARCH POSITIONS

**Assistant Professor**, Department of Astronomy, Stockholm University, Sweden (April 2021 - present)

**Marie Skłodowska-Curie Fellow**, Stockholm University, Sweden (2018-2021)

**Postdoctoral Scholar**, joint between OKC (Sweden) and Caltech (2015-2018)

At Caltech, with Mansi Kasliwal September 2015-March 2017

At OKC, with Claes Fransson April 2017 - August 2018.

**Graduate Research Fellow**, Harvard University (2009-2015)

**RISE Summer Research Intern**, Hamburger Sternwarte, Germany (summer 2008)

**Summer Research Intern**, Princeton University Department of Astrophysical Sciences (summer 2007)

### HONORS AND AWARDS

- Marie Skłodowska-Curie Individual Fellowship (2018)
- NHFP Hubble Fellowship (2018, declined)
- Chambliss Astronomy Student Achievement Award Honorable Mention, AAS (2014)
- Merrill Fellowship, Harvard University (2010-11)
- Phillip Putnam Chase Memorial Fellowship, Harvard University (2009-10)
- Phi Beta Kappa national academic honor society (2009)
- Sigma Xi national research honor society (2009)
- Davis UWC Scholarship, Princeton University (2005-2009)

### PUBLICATION SUMMARY

Total [first-author]: 84 [9] publications, 5490 [569] citations, h-index: 40 [9].

## ACCEPTED FUNDING PROPOSALS (AS PI)

- Hubble Space Telescope data analysis funding, 2019 (\$116K)
- Marie Skłodowska-Curie Individual Fellowship, 2018 (€186K)
- Hubble Space Telescope data analysis funding, 2017 (\$138K)
- Dahlmark Travel Grant, 2017 & 2018 (SEK 16K)
- Swift data analysis funding, 2016 (\$40K)
- Spitzer Space Telescope data analysis funding, 2013 (\$5K)
- Hubble Space Telescope data analysis funding, 2013 (\$61K)

## ACCEPTED TELESCOPE PROPOSALS (AS PI)

- **ESO VLT, Period 106, 2020.** X-Shooter, 9 hours
- **ESO VLT, Period 105, 2020.** X-Shooter, 8 hours
- **ESO VLT, Period 104, 2019.** X-Shooter, 3 hours
- **Hubble Space Telescope, Cycle 27/28, 2019.** COS+STIS, 18 orbits, GO proposal 15847
- **ESO VLT, Period 101, 2017.** X-Shooter, 6 hours
- **Hubble Space Telescope, Cycle 25, 2017.** ACS+WFC3, 28 orbits, GO proposal 15140
- **Swift, Cycle 12, 2016.** 56 ks, GI proposal 1215281
- **Keck, 2016A-2017B.** LRIS, 7 nights
- **Gemini-N, 2015A Fast-Turnaround.** GMOS, 3 hours
- **Gemini-N, 2014B-2015A.** GMOS+NIRI, 7 hours
- **Magellan Telescopes, 2014B-2015A.** LDSS3+IMACS, 3 nights
- **Spitzer Space Telescope, Cycle 10, 2013.** IRAC, 37.6 hours, GO proposal 10056
- **Hubble Space Telescope, Cycle 21, 2013.** ACS, 6 orbits, GO proposal 13326
- **MMT, 2013c - 2015a.** MMTcam, 5 nights

## OBSERVING EXPERIENCE

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|--|----------------------|
| <b>Keck I &amp; II Telescopes</b> LRIS, DEIMOS         | 15 nights, 2015-2018 |
| <b>Palomar 200-in Telescope</b> DBSP                   | 9 nights, 2015-2017  |
| <b>Magellan Telescopes</b> LDSS3, IMACS, FIRE and MIKE | 21 nights, 2011-2015 |
| <b>MMT 6.5 m Telescope</b> BlueChannel, MMTcam         | 13 nights, 2012-2014 |

## TECHNICAL SKILLS

**Data reduction and processing** of optical, UV and infrared data. Includes data taken with *HST* (ACS, WFC3), Magellan (LDSS3, IMACS), MMT (BlueChannel, MMTcam), Gemini (GMOS), Keck (LRIS, Deimos), Palomar 200-in (DBSP), *Swift* (UVOT, XRT), VLT (X-shooter).

**Experience with software** IDL, ds9, IRAF, Python, Matlab, Fortran, Java, Mathematica.

## PROFESSIONAL SERVICE

- **Coordinator**, ZTF Science Working Group on “Physics of Supernovae and Relativistic Explosions” (2017-2021); **ZTF Publication Board member** (2021-)
- **Collaboration Member**: ePESSTO+ (2020-), ENGRAVE (2018-), Zwicky Transient Facility (2017-), Intermediate Palomar Transient Factory (2015-), Large Synoptic Science Telescope Transients & Variables Working Group (2015-), Pan-STARRS1 Science Consortium (2011-)
- **Scientific Organizing Committee Member**: “The Extragalactic Explosive Universe” (ESO, September 2019); “Astronomdagarna 2019” (Stockholm, October 2019); “Shocking Supernovae: surrounding interactions and unusual events” (Stockholm, May 2018)
- **Local Organizing Committee Member**: Zwicky Transient Facility Team Meeting (Stockholm, August 2018)

- **Reviewer/TAC Member:** ESO (Cycles 108-9), NASA FINESST Program (2020), Subaru (S20A), Hubble Space Telescope (Cycle 28, Cycle 25 Mid-Cycle), Swift (Cycle 13), Spitzer (Cycles 12, 13), Gemini (Fast-Turnaround, January 2015)
- **Journal Referee:** MNRAS, ApJ, ApJL (2015- )
- **Exam Committee Member**, Licentiate defense of Lorenza Della Bruna (September 2020) and Sepideh Kianfar (March 2021), Stockholm University
- **Opponent**, Astronomy Department, Stockholm University: Bachelor theses of Stuart West (June 2017) and Nicolas Risberg (June 2019)
- **Judge**, Chambliss Astronomy Student Achievement Award, AAS (meetings 229, 231 and 233)
- **Postdoc Representative: Astronomy Department Board**, Stockholm University (2018-2019)
- **Graduate Student Representative: Committee on Academic Studies**, Astronomy Department, Harvard University (2011-2014)
- **Co-Organizer: Prospective Students Visit**, Astronomy Department, Harvard University (2011)
- **Peer Academic Adviser:** Rockefeller College, Princeton University (2008-09)

## TEACHING AND ADVISING EXPERIENCE

- **Adviser** to Stockholm University student Stuart West, master’s thesis (2021)
- **Adviser** to Stockholm University student Samuel Gullin, bachelor project (spring 2019)
- **Co-Adviser** to Caltech undergraduate student Lindsey Whitesides, both for a summer project (2016) and senior thesis project (2016-17); resulted in article led by Whitesides published in ApJ.
- **Guest Lecturer**, iPTF Summer School, Caltech (July 2016)
- **Guest Lecturer**, ZTF Undergraduate Institute, Caltech (June 2016)
- **Teaching Fellow**, Harvard University, AY 202a: Galaxies and Dynamics (fall 2011). Led problem sessions, graded problem sets, supervised term papers and presentations.
- **Teaching Fellow**, Harvard University, SPU 19: The Energetic Universe (spring 2011). Taught two sections of 12-15 students each, graded problem sets and exams, and led observing sessions.
- **Teaching Assistant**, Princeton University, AST 203: The Universe (spring 2008). Led problem sessions and graded problem sets and exams.

## OUTREACH

- **AAS Journal Author Series** (2021)
- **24/7 Talk** at “Meet IgNobel Prize Winners” event, Stockholm, April 2019
- **Day and Night of Astronomy** public talk, Stockholm, September 2018
- **Stockholm University Telescope Shows** public talk, September 2017
- **Volunteer, Caltech Public Stargazing**, fall 2016
- **Astronomy on Tap Los Angeles** public talk, September 2016
- **Greenway Public Talk** at Palomar Observatory, March 2016
- **Guest Expert:** “Nyhetsmorgon”, TV4 Sweden, January 2016
- **Peer Mentor:** Harvard Astronomy Mentorship Program, 2013-2014
- **Graduate Mentor:** WISTEM Program, Harvard College Women’s Center (2009-2014; mentor to five undergraduate women)

## SCIENTIFIC TALKS

### *Invited Conference Talks*

- 12) *Observational Constraints on Black Hole Formation*. Review talk presented at “The Birth, Life and Death of Black Holes”, EAS Symposium S09, Leiden, Netherlands, June 2021
- 11) *What Powers Superluminous Supernovae?* Review talk presented at “STScI Spring Symposium 2019: The Deaths and Afterlives of Stars”, Baltimore, USA, April 2019.
- 10) *Searching for Superluminous Supernovae with the Zwicky Transient Facility*. Talk presented at “Cosmic Beacons”, Sexten, Italy, February 2019.

- 9) *The Deaths of (Very) Massive Stars*. Review talk presented at “GMT Community Science Meeting: Stars - Birth and Death”, Honolulu, USA, September 2018.
- 8) *Hydrogen-poor Superluminous Supernovae: Observations and Environments*. Review talk presented at “Shocking Supernovae: surrounding interactions and unusual events”, Stockholm, Sweden, May 2018.
- 7) *A CSM Shell Around a Superluminous Supernova Revealed in a Light Echo*. Talk presented at “Astronomdagarna 2017”, Swedish Institute for Space Physics, Kiruna, Sweden, September 2017.
- 6) *Connections Between Hydrogen-Poor Superluminous Supernovae and Long Gamma-Ray Bursts*. Talk presented at “A Multi-Messenger Look at the Origin of Gamma-Ray Bursts”, EWASS Symposium S11, Prague, Czech Republic, June 2017.
- 5) *Superluminous Supernovae and their Host Galaxies*. Review talk presented at “Phenomena, Physics, and Puzzles Of Massive Stars and their Explosive Outcomes”, Santa Barbara, USA, March 2017.
- 4) *Host Galaxies of Superluminous Supernovae*. Review talk presented at “Supernovae: The Outliers”, Garching, Germany, September 2016.
- 3) *Host Galaxies of Superluminous Supernovae: the view from Pan-STARRS and HST*. Talk presented at “The Mysterious Connection Between SLSNe and GRBs”, STScI, USA, May 2016.
- 2) *Host Galaxies of Type I and II Superluminous Supernovae*. Review talk presented at “The Transient Sky”, Harvard, USA, May 2016.
- 1) *Superluminous Supernovae and their Host Galaxies*. Review talk presented at “GMT Community Science Meeting: Transient Phenomena in Astronomy & Astrophysics”, Washington DC, USA, October 2014.

### ***Invited Colloquia / Seminars***

- 16) Colloquium, Oskar Klein Centre, Sweden, October 2020
- 15) Astronomy & Space Physics Seminar, Uppsala University, Sweden, May 2020
- 14) Colloquium, UW Milwaukee Center for Gravitation, Cosmology & Astrophysics, March 2019
- 13) Colloquium, Institute for Theoretical Astrophysics, University of Oslo, Norway, February 2019
- 12) ARI Seminar, Liverpool John Moores University, UK, October 2018
- 11) Astronomy Seminar, Stockholm University, Sweden, May 2018
- 10) Colloquium, CU Boulder Astrophysical & Planetary Sciences, February 2018
- 9) Colloquium, Anton Pannekoek Institute for Astronomy, U. Amsterdam, Netherlands, November 2017
- 8) Colloquium, Radboud University, Netherlands, November 2017
- 7) Astronomy Seminar, Lund Observatory, Sweden, October 2017
- 6) TAC seminar, UC Berkeley, March 2017
- 5) Colloquium, Institute for Astronomy, U. Hawaii, October 2016
- 4) PTF Theory Network, April 2016
- 3) PTF Theory Network, October 2015
- 2) TAC seminar, UC Berkeley, October 2014
- 1) ITC Seminar on Time-Domain Astrophysics, Harvard University, April 2014

### ***Contributed Conference Talks***

- 13) *A CSM Shell Around a Superluminous Supernova Revealed in a Light Echo*. Talk presented at “Keck Science Meeting 2018”, Pasadena, USA, September 2018
- 12) *First Supernova and Relativistic Explosions Science Results from ZTF*. Talk presented at “ZTF Consortium Meeting: the Survey Has Started!”, Stockholm, Sweden, August 2018
- 11) *Superluminous Supernovae from the Pan-STARRS1 Medium Deep Survey*. Talk presented at “Transients in New Surveys: the Undiscovered Country”, Lorentz Center, Netherlands, July 2018.
- 10) *A CSM Shell Around a Superluminous Supernova Revealed in a Light Echo*. Talk presented at “Supernova diversity: prospects & challenges for next-generation surveys”, EWASS symposium S07, Liverpool, UK, April 2018.
- 9) *A CSM Shell Around a Superluminous Supernova Revealed in a Light Echo*. Talk presented at “Deciphering the Violent Universe”, Playa del Carmen, Mexico, December 2017.
- 8) *The Luminous and Rapidly-Evolving SN Ic-BL iPTF16asu*. Talk presented at “Fifty-One Ergs 2017”, Oregon State University, Corvallis, USA, June 2017.

- 7) *The PS1/MDS Superluminous Supernova Sample*. Talk presented at “Superluminous Supernovae in the Next Decade”, Garching, Germany, May 2017.
- 6) *An Observational View of SLSNe as Pair-Instability Supernovae*. Talk presented at “Superluminous Supernovae in the Next Decade”, Garching, Germany, May 2017.
- 5) *Superluminous Supernovae and Other Transients from iPTF*. Talk presented at the iPTF Special Session at the American Astronomical Society Meeting #229, Grapevine, USA, January 2017.
- 4) *Superluminous Supernovae - A Pan-STARRS1 Perspective*. Dissertation talk presented at the American Astronomical Society Meeting #225, Seattle, USA January 2015.
- 3) *The Extreme Environments of Superluminous Supernovae - Connection to Long GRBs?* Talk presented at “Galaxies meet GRBs at Cabo de Gata”, Las Negras, Spain, September 2013.
- 2) *Superluminous Supernovae from the Pan-STARRS Medium Deep Survey*. Talk presented at “Fifty-One Ergs”, NCSU, Raleigh, USA, May 2013.
- 1) *PS1-10bjz: A Fast Superluminous Supernova in a Metal-Poor Host Galaxy*. Talk presented at Pan-STARRS Science Consortium Meeting, Durham University, UK, August 2012.

### **Contributed Conference Posters**

- 6) *A Circumstellar Shell Around a Superluminous Supernova Revealed in a Light Echo*. Poster presented at the American Astronomical Society Meeting #233, Seattle, WA, January 2019.
- 5) *Two New Calcium-Rich Gap Transients in Group and Cluster Environments*. Poster presented at the American Astronomical Society Meeting #229, Grapevine, TX, January 2017.
- 4) *Superluminous Supernovae from the Pan-STARRS Medium Deep Survey*. Poster presented at the iPTF Summer School, Pasadena, CA, August 2015.
- 3) *Staring Into the Beast’s Lair: Host Galaxy Environments of Superluminous Supernovae*. Poster presented at “Supernovae in the Local Universe: Celebrating 10,000 days of SN 1987A”, Coffs Harbor, Australia, August 2014. (Winner **Best Student Poster**.)
- 2) *Host Galaxy Environments of Superluminous Supernovae*. Poster presented at the American Astronomical Society Meeting #224, Boston, MA, June 2014. (**Chambliss Astronomy Achievement Student Award Honorable Mention**.)
- 1) *Ultra-Faint Dwarfs as Probes of First Light*. Poster presented at “Chemistry, Dynamics and Structure of the Milky Way”, KIAA-PKU, Beijing, China, July 2010.

### **Contributed Colloquia, Seminars, Lunch Talks**

- 14) Extreme Objects Seminar, Oskar Klein Centre, June 2021
- 13) Extreme Objects Seminar, Oskar Klein Centre, December 2018
- 12) Supernova Seminar, Queen’s University Belfast, October 2018
- 11) Extreme Objects Seminar, Oskar Klein Centre, March 2018
- 10) Caltech Tea Talk, January 2018
- 9) Cake Talk, Dark Cosmology Centre, Copenhagen, October 2017
- 8) Extreme Objects Seminar, Oskar Klein Centre, February 2017
- 7) Extreme Objects Seminar, Oskar Klein Centre, January 2016
- 6) Princeton University GalRead, November 2014
- 5) Carnegie Observatories Lunch Talk, October 2014
- 4) Caltech Tea Talk, October 2014
- 3) FLASH talk, UCSC, October 2014
- 2) MIT Astrophysics Brown Bag Lunch, September 2014
- 1) ITC Lunch Talk, Harvard University, January 2014

## PUBLICATIONS

Summary [first-author]: 84 [9] publications, 5490 [569] citations, h-index: 40 [9].

### ***First- or Second-Author:***

- 12) *Four (Super)Luminous Supernovae from the First Months of the ZTF Survey*  
**Lunnan, R.**, Yan, L., Perley, D. A., et al. 2020, ApJ, 901, 61
- 11) *A UV Resonance Line Echo from a Shell Around a Hydrogen-Poor Superluminous Supernova*  
**Lunnan, R.**, Fransson, C., Vreeswijk, P. M., et al. 2018, Nature Astronomy, 2, 887
- 10) *Hydrogen-Poor Superluminous Supernovae from the Pan-STARRS1 Medium Deep Survey*  
**Lunnan, R.**, Chornock, R., Berger, E., et al. 2018, ApJ, 852, 2
- 9) *iPTF16asu: A Luminous, Rapidly-Evolving, and High-Velocity Supernova*  
Whitesides, L., **Lunnan, R.**, Kasliwal, M. M., et al. 2017, ApJ, 851, 107
- 8) *Hydrogen-Poor Superluminous Supernovae with Late-Time H-alpha emission: Three Events from the Intermediate Palomar Transient Factory*  
Yan, L., **Lunnan, R.**, Perley, D., et al. 2017, ApJ, 848, 6
- 7) *Two New Calcium-Rich Gap Transients in Group and Cluster Environments*  
**Lunnan, R.**, Kasliwal, M. M., Cao, Y., et al. 2017, ApJ, 836, 60
- 6) *PS1-14bj: a Hydrogen-Poor Superluminous Supernova with a Long Rise and Slow Decay*  
**Lunnan, R.**, Chornock, R., Berger, E., et al. 2016, ApJ, 831, 144
- 5) *Zooming In on the Progenitors of Superluminous Supernovae With the HST*  
**Lunnan, R.**, Chornock, R., Berger, E., et al. 2015, ApJ, 804, 90
- 4) *Hydrogen-Poor Superluminous Supernovae and Long-Duration Gamma-Ray Bursts Have Similar Host Galaxies.*  
**Lunnan, R.**, Chornock, R., Berger, E., et al. 2014, ApJ, 787, 138
- 3) *PS1-10bjz: A Fast, Hydrogen-Poor, Superluminous Supernova in a Metal-Poor Host Galaxy*  
**Lunnan, R.**, Chornock, R., Berger, E., et al. 2013, ApJ, 771, 97
- 2) *The 300 km/s Stream Near Segue1: Insights from High-Resolution Spectroscopy of its Brightest Star*  
Frebel, A., **Lunnan, R.**, Casey, A. R., et al. 2013, ApJ, 771, 39
- 1) *The Effects of Patchy Reionization on Satellite Galaxies of the Milky Way.*  
**Lunnan, R.**, Vogelsberger, M., Frebel, A., Hernquist, L., Lidz, A. and Boylan-Kolchin, M. 2012, ApJ, 746, 109

### ***Nth-Author:***

- 72) *The Photometric and Spectroscopic Evolution of Rapidly Evolving Extragalactic Transients in ZTF*  
Ho, A., Perley, D. A., Gal-Yam, A., **Lunnan, R.**, et al. 2021, submitted to ApJ, arXiv:2105.08811
- 71) *The Palomar Transient Factory Core-Collapse Supernova Host-Galaxy Sample. I. Host-Galaxy Distribution Functions and Environment-Dependence of CCSNe*  
Schulze, S., et al. (including **Lunnan, R.**). 2021, submitted to ApJS, arXiv:2008.05988
- 70) *SN2020bjj: a Tyle Ibn supernova with a long lasting peak plateau*  
Kool, E., et al. (including **Lunnan, R.**). 2021, A&A (accepted), arXiv:2008.04056
- 69) *SN 2017gci: a nearby Type I Superluminous Supernova with a bumpy tail*  
Fiore, A., et al. (including **Lunnan, R.**). 2021, MNRAS, 502, 2120
- 68) *Spectroscopy of the first resolved strongly lensed Type Ia supernova iPTF16geu*  
Johansson, J., et al. (including **Lunnan, R.**). 2021, MNRAS, 502, 510
- 67) *Bright, months-long stellar outbursts announce the explosion of interaction-powered supernovae*  
Strotjohann, N. L., et al. (including **Lunnan, R.**). 2021, ApJ, 907, 99
- 66) *Supernova SN 2020faa -- an iPTF14hls look-alike?*  
Yang, S., et al. (including **Lunnan, R.**). 2021, A&A, 646, A22
- 65) *SuperRAENN: A Semi-supervised Supernova Photometric Classification Pipeline Trained on Pan-STARRS1 Medium Deep Survey Supernovae*  
Villar, V. A., et al. (including **Lunnan, R.**). 2020, ApJ, 905, 94

- 64) *Photometric Classification of 2315 Pan-STARRS1 Supernovae with Superphot*  
Hosseinzadeh, G., et al. (including **Lunnan, R.**). 2020, ApJ, 905, 93
- 63) *The Zwicky Transient Facility Census of the Local Universe I: Systematic search for Calcium rich gap transients reveal three related spectroscopic sub-classes*  
De, K., et al. (including **Lunnan, R.**). 2020, ApJ, 905, 58
- 62) *Helium-Rich Superluminous Supernovae from the Zwicky Transient Facility*  
Yan, L., Perley, D. A., Schulze, S., **Lunnan, R.**, et al. 2020, ApJL, 902, L8
- 61) *PTF11rka: an interacting supernova at the crossroads of stripped-envelope and H-poor superluminous stellar core collapses*  
Pian, E., et al. (including **Lunnan, R.**). 2020, MNRAS, 497, 3542
- 60) *SN2020bvc: a Broad-lined Type Ic Supernova with a Double-peaked Optical Light Curve and a Luminous X-ray and Radio Counterpart*  
Ho, A., et al. (including **Lunnan, R.**). 2020, ApJ, 902, 86
- 59) *An Extremely Energetic Supernova from a Very Massive Star in a Dense Medium*  
Nicholl, M., et al. (including **Lunnan, R.**). 2020, Nature Astronomy, 4, 893
- 58) *The Death Throes of a Stripped Massive Star: An Eruptive Mass-Loss History Encoded in Pre-Explosion Emission, a Rapidly Rising Luminous Transient, and a Broad-Lined Ic Supernova SN2018gep*  
Ho, A., et al. (including **Lunnan, R.**). 2019, ApJ, 887, 169
- 57) *SN2016hil: a Type II Supernova in the Remote Outskirts of an Elliptical Host and its Origin*  
Irani, I., et al. (including **Lunnan, R.**). 2019, ApJ, 887, 127
- 56) *Supernova Photometric Classification Pipelines Trained on Spectroscopically Classified Supernovae from the Pan-STARRS1 Medium-Deep Survey*  
Villar, V. A., et al. (including **Lunnan, R.**). 2019, ApJ, 884, 83
- 55) *PS1-13cbe: The Rapid “Turn on” of a Seyfert 1*  
Katebi, R., et al. (including **Lunnan, R.**). 2019, MNRAS, 487, 4057
- 54) *A Radio Source Coincident with the Superluminous Supernova PTF10hgi: Evidence for a Central Engine and an Analogue of the Repeating FRB121102?*  
Eftekhari, T., et al. (including **Lunnan, R.**). 2019, ApJL, 876, L10
- 53) *The Zwicky Transient Facility: Science Objectives*  
Graham, M. J., et al. (including **Lunnan, R.**). 2019, PASP, 131, 1001
- 52) *Machine Learning for the Zwicky Transient Facility*  
Mahabal, A., et al. (including **Lunnan, R.**). 2019, PASP, 131, 997
- 51) *The Zwicky Transient Facility: System Overview, Performance, and First Results*  
Bellm, E., et al. (including **Lunnan, R.**). 2019, PASP, 131, 995
- 50) *Analysis of broad-lined Type Ic supernovae from the (intermediate) Palomar Transient Factory*  
Taddia, F., et al. (including **Lunnan, R.**). 2019, A&A, 621, 71
- 49) *The luminous late-time emission of the Type Ic supernova iPTF15dtg - evidence for powering from a magnetar?*  
Taddia, F., et al. (including **Lunnan, R.**). 2019, A&A, 621, 64
- 48) *Late-time observations of the extraordinary Type II supernova iPTF14hls*  
Sollerman, J., et al. (including **Lunnan, R.**). 2019, A&A, 621, 30
- 47) *iPTF 16hgs: A double-peaked Ca-rich gap transient in a metal poor, star forming dwarf galaxy*  
De, K., et al. (including **Lunnan, R.**). 2018, ApJ, 866, 72
- 46) *A hot and fast ultrastripped supernova that likely formed a compact neutron star binary*  
De, K., et al. (including **Lunnan, R.**). 2018, Science, 362, 201
- 45) *Results from a Systematic Survey of X-ray Emission from Hydrogen-Poor Superluminous Supernovae*  
Margutti, R., et al. (including **Lunnan, R.**). 2018, ApJ, 864, 45
- 44) *Sifting for Sapphires: Systematic Selection of Tidal Disruption Events in iPTF*  
Hung, T., et al. (including **Lunnan, R.**). 2018, ApJS, 238, 15
- 43) *iPTF16abc and the population of Type Ia supernovae: Comparing the photospheric, transitional and nebular phases*  
Dhawan, S., et al. (including **Lunnan, R.**). 2018, MNRAS, 480, 1445

- 42) *The Unique Afterglow of GRB161219B I: A Refreshed Reverse Shock from Energy Injection*  
Laskar, T., et al. (including **Lunnan, R.**). 2018, ApJ, 862, 94
- 41) *Oxygen and Helium in Stripped-Envelope Supernovae*  
Fremling, C., et al. (including **Lunnan, R.**). 2018, A&A, 618, 37
- 40) *The Complete Light-curve Sample of Spectroscopically Confirmed Type Ia Supernovae from Pan-STARRS1 and Cosmological Constraints from the Combined Pantheon Sample*  
Scolnic, D., et al. (including **Lunnan, R.**). 2018, ApJ, 859, 101
- 39) *Far-UV HST Spectroscopy of an Unusual Hydrogen Poor Superluminous Supernova: SN2017egm*  
Yan, L., et al. (including **Lunnan, R.**). 2018, ApJ, 858, 91
- 38) *An Empirical Study of Contamination in Deep, Rapid, and Wide-Field Optical Follow-Up of Gravitational Wave Events*  
Cowperthwaite, P. S., et al. (including **Lunnan, R.**). 2018, ApJ, 858, 18
- 37) *Spectra of Hydrogen-Poor Superluminous Supernovae from the Palomar Transient Factory*  
Quimby, R. M., et al. (including **Lunnan, R.**). 2018, ApJ, 855, 2
- 36) *Early Observations of the Type Ia Supernova iPTF 16abc: Evidence for Strong Ejecta Mixing or Interaction with Diffuse Material*  
Miller, A. A., et al. (including **Lunnan, R.**). 2018, ApJ, 852, 200
- 35) *A series of energetic eruptions leading to a peculiar H-rich explosion of a massive star*  
Arcavi, I., et al. (including **Lunnan, R.**). 2017, Nature, 551, 210
- 34) *The OmegaWhite survey for short-period variable stars - V. Discovery of an ultracompact hot subdwarf binary with a compact companion in a 44 minute orbit*  
Kupfer, T., et al. (including **Lunnan, R.**). 2017, ApJ, 851, 28
- 33) *Color Me Intrigued: the Discovery of iPTF16fnm, a Supernova 2002cx-like Object*  
Miller, A. A., et al. (including **Lunnan, R.**). 2017, ApJ, 848, 59
- 32) *iPTF16fnl: A Faint and Fast Tidal Disruption Event in an E+A Galaxy*  
Blagorodnova, N., et al. (including **Lunnan, R.**). 2017, ApJ, 844, 46
- 31) *Revisiting Optical Tidal Disruption Events with iPTF16axa*  
Hung, T., et al. (including **Lunnan, R.**). 2017, ApJ, 842, 29
- 30) *Spatially resolved analysis of Superluminous Supernovae PTF11hrq and PTF12dam host galaxies*  
Cikota, A., et al. (including **Lunnan, R.**). 2017, MNRAS, 469, 4705
- 29) *Far-Ultraviolet to Near-Infrared Spectroscopy of the Nearby Hydrogen Poor Superluminous Supernova Gaia16apd*  
Yan, L., et al. (including **Lunnan, R.**). 2017, ApJ, 840, 57
- 28) *iPTF16geu: A Multiply Imaged, Gravitationally Lensed Type Ia Supernova*  
Goobar, A., et al. (including **Lunnan, R.**). 2017, Science, 356, 6335
- 27) *X-rays from the location of the Double-Humped Transient ASASSN-15lh*  
Margutti, R., et al. (including **Lunnan, R.**). 2017, ApJ, 836, 25.
- 26) *On the Early-time Excess Emission in Hydrogen-poor Superluminous Supernovae*  
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