Peter J. Brown

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Highlights

- Observational Astronomer with experience in ground and space-based Ultraviolet and Optical Photometry and Spectroscopy of Supernovae and other Transients
- **Leader of Swift supernova team since 2005 and Swift Cycle 14 Key Project**
- Principal Investigator of External Grants Totaling **$1,048,810**
- **15** refereed First Author Journal Articles, **110+** Coauthored Journal Articles
- 2017 Texas A&M College of Science **Undergraduate Research Mentoring Award**

Research Experience

Visiting Assistant Professor – Texas A&M University 2018 – Present
Research Scientist – Mitchell Institute, Texas A&M University 2016 – 2018
Postdoctoral Research Associate 2012 – 2016
Supervisor: Professor Lifan Wang

- Principal Investigator (PI) of two NASA Astrophysics Data Analysis Program with **$754K** in grant funding for archival studies of ultraviolet supernova data
- PI on HST Cycle 23 and 24 programs to obtain ultraviolet spectroscopy of one ultraviolet-bright and one "normal" type Ia supernova (with **$149K** in funding).
- Aggie Research Leader of a multi-disciplinary team of five undergraduates building core-collapse supernova templates for cosmological simulations
- Mentored graduate student on successful Swift Cycle 10 & 11 Guest Investigator grants to obtain ultraviolet spectra with Swift's Ultraviolet/Optical Telescope (UVOT)
- PI of Swift Cycle 11 Guest Investigator grant for observations and analysis of Superluminous Supernovae, resulting in the discovery of the ultraviolet rebrightening of ASASSN-15lh, and a successful HST DDT proposal for ultraviolet spectroscopy (and $58K in funding)
- PI of Swift Cycle 9 Guest Investigator grant for studying type Ia supernovae in the nearby Hubble flow with Swift and the Carnegie Supernova Project (with $37K in funding)
- Spectroscopically confirmed Dark Energy Survey supernovae with the Hobby-Eberly Telescope

Postdoctoral Research Associate – University of Utah 2009 – 2012
Supervisor: Professor Kyle Dawson

- Co-mentored graduate student Matt Olmstead on supernova host galaxy portion of thesis
- Assisted with instrument commissioning for SDSS-III/BOSS (Sloan Digital Sky Survey; Baryon Oscillation Spectroscopic Survey)
- Analyzed BOSS spectra of SDSS supernova host galaxies
- PI of two Swift Guest Investigator grants to study correlations between ultraviolet properties of type Ia supernovae and their host galaxies

Graduate Research Assistant – Pennsylvania State University 2004 – 2009
Supervisor: Dr. P. W. A. Roming

- Coordinated and analyzed ultraviolet observations of supernovae
- Wrote three successful Swift Guest Investigator proposals (as Science PI) to study type Ia supernovae in the ultraviolet
- Responded in real-time to gamma ray burst alerts and analyzed UVOT observations
- Initiated the creation of new observing modes and assisted with UVOT calibration

Education

Pennsylvania State University August 2009
Ph.D. in Astronomy & Astrophysics
Thesis Title: "The Ultraviolet Properties of Supernovae"
Thesis Advisor: Dr. P. W. A. Roming

Brigham Young University August 2004
B.S. in Physics and Astronomy
Senior Thesis Title: "Observing Gamma Ray Burst Afterglows from BYU's Orson Pratt Observatory"
Thesis Advisor: Professor J. W. Moody

Teaching Experience

ASTR101 Visiting Assistant Professor, Texas A&M Spring 2018
Teaching "Basic Astronomy ASTR101 to a class of 104 students using The Essential Cosmic Perspective with Pearson online homework along with self-made self-reflection and observing projects.

ASTR111 Lab Coordinator, Texas A&M 2015-2016
Supervised the graduate student assistants teaching the ASTR111 labs, trained in the lab instruction, taught labs as needed, maintained lab manuals, telescopes, and other equipment, coordinated class schedules with department and instructors

Substitute/Guest Instructor, Texas A&M, Penn State University, U. of Utah, Utah Valley State College 2004-2017
Substituted or gave guest lectures for large undergraduate classes

Teaching Assistant, Pennsylvania State University Fall 2004
Astronomy 011 "Elementary Astronomy Lab" – Independently led lab-based course, taught class lectures, gave lab demonstrations, held office hours, graded assignments, and assigned final grades

Teaching Assistant, Brigham Young University 2003 – 2004
Physics 329 "Astronomical Observing" – taught and supervised use of the on campus telescopes and CCDs, IRAF data reduction, and period analysis of short-period variable stars
Physics 127 "Introductory Astronomy" – taught constellations in the night sky and planetarium, conducted review sessions, assisted with and graded observation project reports

Mentoring Experience

Recipient of 2017 Texas A&M College of Science Undergraduate Research Mentoring Award

Mentored Undergraduate (UG) and Graduate (G) Students
Graduate students were formally advised by their faculty advisor but mentored by Dr. Brown
• Katya Leigig (UG/REU: 2018) – IIb or not IIb? Archive Light curves and template generation
• Aggienova Research Team (UG: Fall 2017) Srinivas Tankasala, Alci-Lou Pena, Mark Turpen, Noah McHugh, Britton Beeny, Cooper Dix, Ethan Viera – Creating the AggieNova spectral template series
• Sarah Walker (UG/REU: 2017) – UVOT photometry and SN Ia light curve fitting
• Tate Walker (UG: 2017-2018) – contamination of reddening maps by nearby galaxies • Britton Beeny (UG: 2016-2017) – Host Galaxy Photometry and Morphology, Data retrieval, template generation
• Cooper Dixon (UG: 2017) – SED creation
• Andrew Quick (G: 2014-2017) – Ultraviolet photometry of type IIP supernovae
• Yi Yang (G: 2014-current) – HST Imaging Polarimetry, Supernova dust reddening, Ultraviolet studies of supernova galaxies
• Aggienova Research Team (UG: Spring 2017) Britton Beeny, Cooper Dix, Ethan Viera, Leslie Laguna, Javier Romero – Creating Core-Collapse Supernova Templates for Cosmological Simulations

• Madison Smith (UG/REU: 2016) – Machine Learning and Photometric Classification of Supernovae with Ultraviolet Photometry
• Nancy Landez (UG: 2016) – Disentangling Red and Reddened SNe Ia
• Mike Smitka (G: 2013-2016) – Ultraviolet spectroscopy and bolometric light curves of SNe Ia
• Shiqing Zhang (UG: fall 2015) – database of supernova host galaxy properties
• Joanna Schiefelbein (UG: summer 2014) – producing Swift UV photometry of 100+ supernovae
• Ben Forrest (G: 2013-2014) – color-magnitude diagrams of type Ia supernovae
• Matt Olmstead (G: 2009-2012) – host galaxy spectroscopy of Sloan supernovae

Funded Grant Proposals

Total > $ 1.1 M

Supernova Key Project: Swift Response to Nearby Supernovae 2018-2019
PI – NASA Swift Guest Investigator Program, Cycle 14 – $100,000

Seeing Core-Collapse Supernovae in the Ultraviolet 2017-2019
PI – NASA Astrophysics Data Analysis Program, 2016 – $478,291

Ultraviolet Spectra of a Normal Standard Candle 2016-2017
PI – Hubble Space Telescope Cycle 24 GO #14665– $87,896

Ultraviolet Spectroscopy of the Unprecedented Rebrightening of the Most Luminous Supernova 2015-2016
PI – Hubble Space Telescope Cycle 23 DDT #14450– $18,449

An Ultraviolet View of Overluminous Type Ia Supernovae 2015-2016
PI – Hubble Space Telescope Cycle 23 GO #14144– $61,169

Ultraviolet Properties of Superluminous Supernovae over Ten Billion Years 2015-2016
PI – Swift Guest Investigator program, Cycle 11 – $40,000

Decontaminating the Swift UV-Grism Sample of SNe Ia to Measure the UV Diversity 2015-2016
Co-I – Swift Guest Investigator program, Cycle 11 (PI – N. Suntzeff, Texas A&M)
Led by Graduate student M. Smitka

Understanding Supernovae With A Swift Ultraviolet Archive 2013-2017
PI – NASA Astrophysics Data Analysis Program, 2012 – $276,007

Swift Ultraviolet Spectroscopy of Superluminous and 2002cx-like Type Ia Supernovae 2014-2015
Co-I – Swift Guest Investigator program, Cycle 10 (PI – N. Suntzeff, Texas A&M)
Led by Graduate student M. Smitka

Improving Type Ia Supernovae as Standard Candles by Correlating the Ultraviolet and Optical Properties 2013-2014
PI – Swift Guest Investigator program, Cycle 9 – $37,000

Improving Standard Candles through Ultraviolet Studies: The Effect of Host Galaxy Environment on Type Ia Supernovae 2010-2011
PI – Swift Guest Investigator program, Cycle 7 – $15,000

Ultra-Violet Effects of Environment on Type Ia Supernovae 2009-2010
PI – Swift Guest Investigator program, Cycle 6 – $34,998

Environmental Effects on Type Ia Supernovae as Standard Candles in the Ultra-Violet 2006-2009
Science PI – Swift Guest Investigator program, Cycles 3,4,5

Observing Proposals

Completing the Ten Year Swift Supernova Archive 2015-2016
PI – Swift Guest Investigator Fill-in program, Cycle 12

Swift Ultraviolet/X-ray Observations of Supernovae 2005 – Present
PI – over one hundred accepted Target of Opportunity requests

HET Observations of Dark Energy Survey Supernovae 2012 – 2013
PI – Spectroscopic classification of Dark Energy Survey transients

HET Observations of Swift Supernovae 2005 – 2009
PI – Low resolution spectroscopy with the Hobby-Eberly Telescope

Collaborative Programs

Spectropolarimetry of Infant Supernovae 2018
Co-I – Very Large Telescope, PI – Y. Yang (Weizmann Institute)

Supernova Ia Polarization Survey 2018
Co-I – Very Large Telescope, PI – A. Cikota (ESO, Max Plank Institute for Astrophysik)

A Second Ladder: Testing for Bias in the Type Ia Distance Scale with SBF 2016-2017
Co-I – Hubble Space Telescope, Cycle 24, PI – P. Milne (U. Arizona)

Far UV Spectroscopy of Superluminous Supernovae 2016-2017
Co-I – Hubble Space Telescope, Cycle 24, PI – R. Quimby (SDSU)

Polarimetry of ASASSN-15lh as a probe of explosion physics of the most luminous supernova ever discovered 2015
Co-I – Hubble Space Telescope, Director's Discretionary Time
PI – Y. Yang (grad student, Texas A&M)

Imaging Polarimetry of Light Echoes around SN 2014J 2015-2017
Co-I – Hubble Space Telescope, Cycle 23, PI – L. Wang (Texas A&M)

Understanding the Progenitor Systems, Explosion Mechanisms, and Cosmological Utility of Type Ia Supernovae 2014-2015
Co-I – Hubble Space Telescope, Cycle 22, PI – R. Foley (U. Illinois)

Testing the Standardizability of Type Ia Supernovae with the Cepheid Distance of a Twin Supernova 2014-2015
Co-I – Hubble Space Telescope, Cycle 22, PI – R. Foley (U. Illinois)

Polarimetry of SN 2014J in M82 as a Probe of Its Dusty Environment 2014-2015
Co-I – Hubble Space Telescope, Cycle 22, PI – L. Wang (Texas A&M)

Swift Science/Ultraviolet Optical Telescope Instrument Teams 2004-current

Dark Energy Survey: Supernova working group member 2012-current

Survey Using DECam for Superluminous Supernovae (SUDSS) Co-I 2014-current

Sloan Digital Sky Survey II: Supernova Survey External Collaborator

Sloan Digital Sky Survey III: Baryon Oscillation Spectroscopic Survey 2009-2012

Service

Organizer, Dimebox Institute for Supernova Astrophysics 2013-2015
Coordinate meetings amongst researchers at Texas A&M, the U. of Texas, Southern Methodist U., U. of Texas-San Antonio, Texas Tech, and Southwest Research Institute.

Referee – Astrophysical Journal, MNRAS, Nature 2013-current

Chair of a NASA proposal review committee

Organizing Committee, Texas A&M Astronomy Symposium 2012-2016

Graduate Student representative on Graduate Program Committee, Pennsylvania State University 2007 – 2009
Represented students in issues of curriculum, recruiting, and compensation.

Outreach

Special Guest, Pennsylvania, Utah, Texas 2009-current
Talk about astronomy to school classes and amateur astronomy groups

Boy Scounts of America volunteer 2015 – 2016
Taught a class from the new STEM NOVA program
Led a star party for summer camp instructors to teach them how to teach astronomy

Physicsfest Volunteer, Texas A&M 2012 – 2017
Described the process of supernova hunting to enthusiastic visitors
Assisted visitors in creating their own colorful astronomical images

Astrofest Volunteer, Pennsylvania State University 2005 – 2008
Assisted with roof top observing, discussed Swift satellite, and gave public talks – "The Swift Gamma Ray Burst Explorer" and "My Trip to Mars"

Planetarium Presenter, Rooftop Observing Guide, Brigham Young University 2002 – 2004
Gave public presentations in the planetarium and assisted with roof top observing

Honors

College of Science Undergraduate Research Mentoring Award 2017

Bruno Rossi Prize – Neil Gehrels and the Swift Team 2007

NASA Group Achievement Award – Swift Ground Team 2007

National Merit/Heritage Scholar – Brigham Young University 1997–1998, 2000–2003

Eagle Scout – Boy Scouts of America 1997

Invited Talks

Red or Reddened? Ultraviolet Colors of Type Ia Supernovae
Supernova group seminar
Stockholm, Sweden, May 25, 2018

Measuring the Universe with Exploding Stars
Texas Tech Physics & Astronomy Colloquium
Lubbock, Texas, USA, February 13, 2018

Measuring the Universe with Exploding Stars
University of Houston-Clear Lake Physics Seminar Series
Clear Lake, Texas, USA, February 5, 2018

The Future of Supernova Cosmology
Brigham Young University Physics & Astronomy Colloquium
Provo, Utah, USA, January 31, 2018

Measuring the Universe with Exploding Stars
University of Nevada-Reno Colloquim
Reno, Nevada, USA, January 26, 2018

Calibrating Exploding Stars to Measure the Universe
University of Nevada-Reno Student Lunch Talk
Reno, Nevada, USA, January 26, 2018

Calibrating Exploding Stars to Measure the Universe
Trinity University Colloquium
San Antonio, Texas, USA, October 10, 2017

Classifying Millions of Supernovae with LSST
Statistics & Astronomy Workshop
College Station, Texas, USA, June 15, 2017

Comparing Superluminous Supernovae in the Ultraviolet Across the History of the Universe
MIAPP Workshop: SUPERLUMINOUS SUPERNOVAE IN THE NEXT DECADE
Garching, Germany, May 3, 2017

Using the Ultraviolet to Understand the Infrared
Mitchell Workshop For James Webb Space Telescope Early Release Science planning
Cook's Branch Nature Conservancy, Texas, April 26, 2017

Ultraviolet Update
Mitchell Workshop with Carnegie Supernova Project
Cook's Branch Nature Conservancy, Texas, April 12, 2017

Calibrating Exploding Stars to Measure the Universe
University of Texas-Arlington Colloquium
Arlington, Texas, USA, March 1, 2017

Measuring the Universe with Exploding Stars
Texas A&M Astronomy seminar
College Station, Texas, USA, December 5, 2016

Type Ia Supernova Ultraviolet Outliers
SUPERNOVAE: THE OUTLIERS
Garching bei Muenchen, Germany, September, 2016

Measuring the Universe with Ultraviolet Explosions
Brigham Young University Physics & Astronomy Colloquium
Provo, UT, USA, January 20, 2016

Calibrating Exploding Stars for Precision Cosmology
University of Texas-San Antonio Colloquium
San Antonio, Texas, USA, February 13, 2015

Calibrating Exploding Stars for Precision Cosmology
Sam Houston State University Colloquium
Huntsville, Texas, USA, February 12, 2015

Swift Supernovae: The Next Ten Years
Swift: Ten Years of Discovery Meeting
Rome, Italy, Dec 4, 2014

Ultraviolet Explosions
INAF – Astronomical Observatory of Padova Research Seminar
Padova, Italy, Dec 1, 2014

Calibrating Exploding Stars for Precision Cosmology
Baylor University Colloquium
Waco, Texas, USA, Sep 3, 2014

Ultraviolet Observations of Supernovae with Swift:
Past, Present, and Future
Swift Science Team Planning Meeting
State College, Pennsylvania, USA, Oct 28-30, 2013

An Ultraviolet View of Type Ia Supernova Progenitors
Mitchell Workshop
Cook's Branch Nature Conservancy, Texas, April 9-11, 2013

Ultraviolet Studies of Supernovae: The Peril and the Promise
Mitchell Workshop
Cook's Branch Nature Conservancy, Texas, April 12-14, 2012

Ultraviolet Studies of Supernovae: The Peril and the Promise
Texas A&M Particle-Astrophysics-Cosmology Seminar
College Station, Texas, August 29, 2012

Stellar Explosions
Utah Valley University Physics Department Colloquium
Orem, Utah, USA, Mar 30, 2011

Improving Standard Candles with Ultraviolet Observations
of Type Ia Supernovae
SNOWPAC conference
Snowbird, Utah, USA, Jan 31-Feb 5, 2011

Contributed Talks and Posters

Ultraviolet-Bright Supernovae
Shocking Supernovae
Stockholm, Sweden, May 2018

AggieNova UVOIR Spectral Templates
Deciphering the Violet Universe
Playa Del Carmen, Mexico, December, 2017

Ultraviolet Spectroscopy of a Super-Chandra Type Ia Supernova Candidate
American Astronomical Society Meeting
Austin, TX, June, 2017

Transparency and Reproducibility with the
Swift Optical Ultraviolet Supernova Archive
Texas A&M Postdoc Symposium
College Station, TX, USA, September, 2016

The Ultraviolet Superluminous ASASSN-15lh
The Transient Sky
Boston, MA, May, 2016

UV Photometric Classification of Supernovae
Photometric Classification of SuperNovae Ia
Chicago, IL, USA, April, 2016

Understanding the Ultraviolet Flux from Supernovae
American Astronomical Society Meeting
Kissimmee, FL, USA, January, 2016

Improving the Swift Supernova Results
Time Domain Astrophysics with Swift II
Clemson, South Carolina, USA, Oct 18-21, 2015

The Ultraviolet Diversity of Type Ia Supernovae
Fifty-One Ergs
Raleigh, North Carolina, USA, June 1-5, 2015

Swift Ultraviolet Supernova Observations: Past and Future
Hotwiring the Transient Universe - IV
Santa Barbara, California, USA, May 12-15, 2015

An Ultraviolet View of Supernova Progenitors
Supernovae in the Local Universe
Coffs Harbour, Australia, Aug 11-15, 2014

Ultraviolet Observations of Supernovae
ESO Workshop on Challenges in UV Astronomy
Garching bei Muenchen, Germany, October 7-11, 2013

Ultraviolet Observations of Supernovae with Swift
Supernovae Illuminating the Universe from Individuals to Populations
Garching bei Muenchen, Germany, September 10-14, 2012

Swift Ultraviolet Observations of Supernovae and their Host Galaxies
Supernovae and their Host Galaxies
Sydney, Australia, June 20-24, 2011

Ultraviolet Supernova Observations: One of Swift's Greatest Legacies
Time Domain Astrophysics with Swift
Clemson, South Carolina, USA, October 24-26, 2011

Ultraviolet Properties of Supernovae
Progenitors and Environments of Stellar Explosions
Paris, France, June 28-July 2, 2012

Are Type Ia Supernovae Standard Candles in the UV?
American Astronomical Society Meeting
Long Beach, California, USA, January, 2009

Ultraviolet Lightcurves of Supernovae with Swift UVOT
American Astronomical Society Meeting
Austin, Texas, USA, January, 2008

Swift UVOT Observations of Core-Collapse Supernovae
20 Years of SN1987A
Aspen, Colorado, USA, February, 2007

Swift Supernova Observations
American Astronomical Society Meeting
Washington, D.C., USA, January 8-12, 2006

References

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First-Author Refereed Publications - H Index: 12 (first author only)

17. Red and Reddened: Ultraviolet through Near-Infrared Observations of Type Ia Supernova 2017erp
Brown, P. J., Hosseinzadeh, G., Jha, S., et al. 2018, ApJ, submitted; arXiv:1808.04729

16. The Ultraviolet Colors of Type Ia Supernovae and their Photospheric Velocities
Brown, P. J., Perry*, J., Beeny*, B., Milne, P., Wang, X. 2018, ApJ, submitted; arXiv:1807.10391

15. Reddened, Redshifted, or Intrinsically Red?
Understanding Near-Ultraviolet Colors of Type Ia Supernovae
Brown, P. J., Landez*, N., Milne, P. A., & Stritzinger, M. 2017, ApJ, 836, 2

14. ASASSN-15lh: A Superluminous Ultraviolet Rebrightening Observed by Swift and Hubble
Brown, P. J., et al. 2016, ApJ, 828, 3

13. Interpreting Flux from Broadband Photometry
Brown, P. J., et al. 2016, AJ, 152, 4

12. Theoretical Clues to the Ultraviolet Dispersion of Type Ia Supernovae
Brown, P. J., et al. 2015, ApJ, 809, 37

11. The First Ten Years of Swift Supernovae
Brown, P. J., Roming, P. W. A., & Milne, P. A. 2015, JHEAP, 7, 111
Invited Review Paper for special Ten Years of Swift issue

10. Swift Ultraviolet Observations of Supernova 2014J in M82:
Large Extinction from Interstellar Dust
Brown, P. J., et al. 2015, ApJ, 805, 74

9. The Ultraviolet Brightest Type Ia Supernova 2011de
Brown, P. J. 2014, ApJL, 796, 18

8. SOUSA: the Swift Optical/Ultraviolet Supernova Archive
Brown, P. J., et al. 2014, Ap&SS, 354, 89

7. Ultraviolet Observations of Super-Chandrasekhar Mass
Type Ia Supernova Candidates with Swift UVOT
Brown, P. J., et al. 2014, ApJ, 787, 29

6. A Swift Look at SN2011fe:
The Earliest Ultraviolet Observations of a Type Ia Supernova
Brown, P. J., et al. 2012, ApJ, 753, 22

5. Constraints on Type Ia Supernova Progenitor Companions
from Early Ultraviolet Observations with Swift
Brown, P. J., et al. 2012, ApJ, 749, 18

4. The Absolute Magnitudes of Type Ia Supernovae in the Ultraviolet
Brown, P. J., et al. 2010, ApJ, 721, 1608

3. Ultraviolet Light Curves of Supernovae with Swift UVOT
Brown, P. J., et al. 2009, AJ, 137, 4517

2. Early Ultraviolet, Optical, and X-Ray Observations
of the Type IIP SN2005cs in M51 with Swift
Brown, P. J., et al. 2007, ApJ, 659, 1488

1. Ultraviolet, Optical, and X-Ray Observations of the Type Ia
Supernova 2005am with Swift
Brown, P. J., et al. 2005, ApJ, 635, 1192

Coauthored Publications

110. X-ray Swift observations of SN 2018cow
Rivera-Sandoval, L.E., Maccarone, T. J., Corsi, A., **Brown, P. J.**, Pooley, D., & Wheeler, J. C. 2018, MNRAS, in press, arXiv:1807.06369

109. Seeing Double: ASASSN-18bt Exhibits a double-power-law Rise in the Early-Time em K2 Light Curve
Shappee, B., et al. including **Brown, P. J.**, AAS Journals, submitted, arXiv:1807.11526

108. The Data Release of the Sloan Digital Sky Survey-II Supernova Survey
Sako, M., et al. including **Brown, P. J.** 2018, PASP, 130, 4002

107. Significant Luminosity Differences of Two Twin Type Ia Supernovae
Foley, R., et al. including **Brown, P. J.**, 2018, MNRAS, submitted, arXiv:1806.08359

106. SN 2015as: a low-luminosity Type IIb supernova without an early light-curve peak
Gangopadhyay, A., et al. including **Brown, P. J.** 2018, MNRAS, 476, 3611

105. SN 2012fr: Ultraviolet, Optical, and Near-infrared Light Curves of a Type Ia Supernova Observed within a Day of Explosion
Contreras, C., et al. including **Brown, P. J.** 2018, ApJ, 859, 24

104. Far-UV HST Spectroscopy of an Unusual Hydrogen-poor Superluminous Supernova: SN2017egm
Yan, L., et al. including **Brown, P. J.**2018, ApJ, 858, 91

103. SN 2016X: a type II-P supernova with a signature of shock breakout from explosion of a massive red supergiant
Huang, F., et al. including **Brown, P. J.** 2018, MNRAS, 475, 3959

102. Mapping Circumstellar Matter with Polarized Light: The Case of Supernova 2014J in M82
Yang, Y., et al. including **Brown, P. J.** 2018, ApJ, 854, 55

101. Studying the Ultraviolet Spectrum of the First Spectroscopically Confirmed Supernova at Redshift Two
Smith, M., et al. including **Brown, P. J.** 2018, ApJ, 854, 37

100. Gaia17biu/SN 2017egm in NGC 3191: The Closest Hydrogen-poor Superluminous Supernova to Date Is in a Normal, Massive, Metal-rich Spiral Galaxy
Bose, S.., et al. including **Brown, P. J.** 2018, ApJ, 853, 57

99. SN 2016X: a type II-P supernova with a signature of shock breakout from explosion of a massive red supergiant
Huang, F., et al. including **Brown, P. J.** 2018, MNRAS, 475, 3959

98. A First Transients Survey with JWST: the FLARE project
Wang, L., et al. including **Brown, P. J.** 2017, arXiv:1710.07005

97. ASASSN-14ha and the early Ultraviolet Evolution of Type IIP Supernovae
Quick*, A., **Brown, P. J.**, & Suntzeff, N. B. 2017, AAS Journals, submitted

96. Studying the Ultraviolet Spectrum of the First Spectroscopically Confirmed Supernova at redshift two
Smith, M., et al. including **Brown, P. J.** 2017, arXiv:1712.04535

95. The nearby Type Ibn supernova 2015G: signatures of asymmetry and progenitor constraints
Shivvers, I., et al. including **Brown, P. J.** 2017, MNRAS, 471, 4381

94. Two transitional type Ia supernovae located in the Fornax cluster member NGC 1404: SN 2007on and SN 2011iv
Gall, C., et al. including **Brown, P. J.** 2018, A&A, 611, 58

93. Late-time flattening of Type Ia Supernova light curves: Constraints from SN 2014J in M82
Yang, Y., et al. including **Brown, P. J.** 2017, arXiv:1704.01431

92. Early Blue Excess from the Type Ia Supernova 2017cbv and Implications for Its Progenitor
Hosseinzadeh, G., et al. including **Brown, P. J.** 2017, ApJL, 845, 11

91. The Nearby Type Ibn Supernova 2015G: Signatures of Asymmetry and Progenitor Constraints
Shivvers, I., et al. including **Brown, P. J.** 2017, MNRAS, 471, 4381

90. Interstellar-Medium Mapping in M82 Through Light Echoes Around Supernova 2014J
Yang*, Y., et al. including **Brown, P. J.** 2017, ApJ, 834, 60

89. Optical Sky Brightness and Transparency During the Winter Season at Dome A Antarctica From the Gattini-Allsky Camera
Yang*, Y., et al. including **Brown, P. J.** 2017, AJ, 154, 6

88. Far-Ultraviolet to Near-Infrared Spectroscopy of A Nearby Hydrogen Poor Superluminous Supernova Gaia16apd
Yan, L., et al. including **Brown, P. J.** 2017, ApJ, 840, 57

87. Constraints on the Progenitor of SN 2016gkg From Its Shock-Cooling Light Curve
Arcavi, I., et al. including **Brown, P. J.** 2017, ApJL, 837, 2

86. Optical and Ultraviolet Observations of the Very Young Type IIP SN 2014cx in NGC 337
Huang, F., et al. including **Brown, P. J.** 2016, ApJ, 832, 139

85. OGLE16aaa - a Signature of a Hungry Super Massive Black Hole
Wyrzykowski, L., et al. including **Brown, P. J.** 2017, MNRAS, 465, 114

84. Ultraviolet diversity of Type Ia Supernovae
Foley, R., et al. including **Brown, P. J.** 2016, MNRAS, 461, 1308

83. Decontaminating Swift UVOT Grism Observations of Transient Sources
Smitka*, M. T., **Brown, P. J.**, Kuin, P. & Suntzeff, N. B. 2016, PASP, 128, 34501

82. The diversity of Type II supernova versus the similarity in their progenitors
Valenti, S., et al. including **Brown, P. J.** 2016, MNRAS, 459, 3939

81. A 2.4% Determination of the Local Value of the Hubble Constant
Riess, A., et al. including **Brown, P. J.** 2016, ApJ, 826, 56

80. Dead or Alive? Long-time evolution of SN 2015bh (SNhunt275)
Elias-Rosa, N., et al. including **Brown, P. J.** 2016, MNRAS, 463, 3894

79. The Intermediate Luminosity Optical Transient SN 2010da:
The Progenitor, Eruption and Aftermath of a Peculiar Supergiant High-mass X-ray Binary
Villar, V., et al. including **Brown, P. J.** 2016, ApJ, 830, 11

78. UVOptical Observation of Type Ia Supernova SN 2013dy in NGC 7250
Zhai, Q., et al. including **Brown, P. J.** 2016, AJ, 151, 125

77. Comparative analysis of SN 2012dn optical spectra: days -14 to +114
Parrent, J. T. et al, incl. **Brown, P. J.** 2016, MNRAS, 457, 3702

76. DES14X3taz: A Type I Superluminous Supernova
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