

PETER J. BROWN

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Highlights

- Observational Astrophysicist 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**
- **PI of 5 Hubble Space Telescope Programs**
- Principal Investigator of External Grants Totaling over **\$2,600,000**
- **18** Refereed, First Author Journal Articles, **140+** Coauthored Journal Articles
- 2017 Texas A&M College of Science **Undergraduate Research Mentoring Award**

Education

- Ph.D. in Astronomy & Astrophysics – Pennsylvania State University** August 2009
 Thesis Title: “The Ultraviolet Properties of Supernovae”
 Thesis Advisor: Dr. P. W. A. Roming
- B.S. in Physics and Astronomy – Brigham Young University** August 2004
 Senior Thesis Title: “Observing Gamma Ray Burst Afterglows from BYU’s Orson Pratt Observatory”
 Thesis Advisor: Professor J. W. Moody

Academic Positions

- Research Scientist – Mitchell Institute, Texas A&M University** 2016 – present
Visiting Associate Professor Spring 2020
Visiting Assistant Professor Spring 2018
Mitchell Fellow, Postdoctoral Research Associate 2012 – 2016
 Supervisor: Professor Lifan Wang
- Postdoctoral Research Associate – University of Utah** 2009 – 2012
 Supervisor: Professor Kyle Dawson
- Graduate Research Assistant – Pennsylvania State University** 2004 – 2009
 Supervisor: Dr. P. W. A. Roming

Funded Grant Proposals

- ULTRAVIOLET SPECTROSCOPY OF EXTREME STANDARD CANDLES** 2020-2022
 PI – Hubble Space Telescope Cycle 28 Guest Observer – 62 Orbits – \$202,214
- RED OR REDDENED SUPERNOVAE? UNDERSTANDING THE ULTRAVIOLET DIFFERENCES OF NORMAL STANDARD CANDLES** 2020-2022
 PI – Hubble Space Telescope Cycle 28 Guest Observer – 28 Orbits – \$67,790
- SWIFT AND SIRAH: UV TO NIR OBSERVATIONS OF TYPE IA SUPERNOVAE BEYOND THE TWILIGHT ZONE** 2020-2021
 PI – Swift Guest Investigator Program, 2020 – \$40,000
- UNLOCKING TYPE IA SUPERNOVAE WITH AN ULTRAVIOLET KEY** 2020-2022
 PI – NASA Astrophysics Theory Program, 2019 – \$705,188
- SOUSA’S SEQUEL: IMPROVING STANDARD CANDLES BY IMPROVING UV CALIBRATION** 2020-2022
 PI – NASA Astrophysics Data Analysis Program, 2019 – \$472,032

Total > \$ 2.6 M

	SUPERNOVA KEY PROJECT: SWIFT RESPONSE TO NEARBY SUPERNOVAE PI – NASA Swift Guest Investigator Program, Cycle 14 – \$100,000	2018-2019
	SEEING CORE-COLLAPSE SUPERNOVAE IN THE ULTRAVIOLET PI – NASA Astrophysics Data Analysis Program, 2016 – \$478,291	2017-2019
	ULTRAVIOLET SPECTRA OF A NORMAL STANDARD CANDLE PI – Hubble Space Telescope Cycle 24 GO #14665 14 orbits– \$87,896	2016-2017
	ULTRAVIOLET SPECTROSCOPY OF THE UNPRECEDENTED REBRIGHTENING OF THE MOST LUMINOUS SUPERNOVA PI – Hubble Space Telescope Cycle 23 DDT 2 orbits #14450– \$18,449	2015-2016
	AN ULTRAVIOLET VIEW OF OVERLUMINOUS TYPE IA SUPERNOVAE PI – Hubble Space Telescope Cycle 23 GO #14144 7 orbits – \$61,169	2015-2016
	ULTRAVIOLET PROPERTIES OF SUPERLUMINOUS SUPERNOVAE OVER TEN BILLION YEARS PI – Swift Guest Investigator program, Cycle 11 – \$40,000	2015-2016
	DECONTAMINATING THE SWIFT UV-GRISM SAMPLE OF SNE IA TO MEASURE THE UV DIVERSITY Co-I – Swift Guest Investigator program, Cycle 11 (PI – N. Suntzeff, Texas A&M) Led by Graduate student M. Smitka	2015-2016
	UNDERSTANDING SUPERNOVAE WITH A SWIFT ULTRAVIOLET ARCHIVE PI – NASA Astrophysics Data Analysis Program, 2012 – \$276,007	2013-2017
	SWIFT ULTRAVIOLET SPECTROSCOPY OF SUPERLUMINOUS AND 2002CX-LIKE TYPE IA SUPERNOVAE Co-I – Swift Guest Investigator program, Cycle 10 (PI – N. Suntzeff, Texas A&M) Led by Graduate student M. Smitka	2014-2015
	IMPROVING TYPE IA SUPERNOVAE AS STANDARD CANDLES BY CORRELATING THE ULTRAVIOLET AND OPTICAL PROPERTIES PI – Swift Guest Investigator program, Cycle 9 – \$37,000	2013-2014
	IMPROVING STANDARD CANDLES THROUGH ULTRAVIOLET STUDIES: THE EFFECT OF HOST GALAXY ENVIRONMENT ON TYPE IA SUPERNOVAE PI – Swift Guest Investigator program, Cycle 7 – \$15,000	2010-2011
	ULTRA-VIOLET EFFECTS OF ENVIRONMENT ON TYPE IA SUPERNOVAE PI – Swift Guest Investigator program, Cycle 6 – \$34,998	2009-2010
	ENVIRONMENTAL EFFECTS ON TYPE IA SUPERNOVAE AS STANDARD CANDLES IN THE ULTRA-VIOLET Science PI – Swift Guest Investigator program, Cycles 3,4,5	2006-2009
Observing Proposals	COMPLETING THE TEN YEAR SWIFT SUPERNOVA ARCHIVE PI – Swift Guest Investigator Fill-in program, Cycle 12	2015-2016
	HET OBSERVATIONS OF DARK ENERGY SURVEY SUPERNOVAE PI – Spectroscopic classification of Dark Energy Survey transients	2012 – 2013
	HET OBSERVATIONS OF SWIFT SUPERNOVAE PI – Low resolution spectroscopy with the Hobby-Eberly Telescope	2005 – 2009
	SWIFT ULTRAVIOLET/X-RAY OBSERVATIONS OF SUPERNOVAE PI – over four hundred seventy accepted Target of Opportunity requests	2005 – Present

Collaborative Programs

CARNEGIE SUPERNOVA PROJECT (PI: PHILLIPS)	2019-present
SWIFT KEY PROJECT: MAXIMIZING SWIFT'S IMPACT WITH THE GLOBAL SUPERNOVA PROJECT (PI: HOWELL)	2019-2021
GLOBAL SUPERNOVA PROJECT	2017-present
DARK ENERGY SCIENCE COLLABORATION	2019-present
LSST TRANSIENT AND VARIABLE STARS WORKING GROUP	2016-present
DARK ENERGY SURVEY: SUPERNOVA WORKING GROUP MEMBER	2012-present
SPECTROPOLARIMETRY OF INFANT SUPERNOVAE Co-I – Very Large Telescope, PI – Y. Yang (Weizmann Institute)	2018
SUPERNOVA IA POLARIZATION SURVEY Co-I – Very Large Telescope, PI – A. Cikota (ESO, Max Plank Institute for Astrophysik)	2018
A SECOND LADDER: TESTING FOR BIAS IN THE TYPE IA DISTANCE SCALE WITH SURFACE BRIGHTNESS FLUCTUATIONS Co-I – Hubble Space Telescope, Cycle 24, PI – P. Milne (U. Arizona)	2016-2017
FAR UV SPECTROSCOPY OF SUPERLUMINOUS SUPERNOVAE Co-I – Hubble Space Telescope, Cycle 24, PI – R. Quimby (SDSU)	2016-2017
POLARIMETRY OF ASASSN-15LH AS A PROBE OF EXPLOSION PHYSICS OF THE MOST LUMINOUS SUPERNOVA EVER DISCOVERED Co-I – Hubble Space Telescope, Director's Discretionary Time PI – Y. Yang (grad student, Texas A&M)	2015
IMAGING POLARIMETRY OF LIGHT ECHOES AROUND SN 2014J Co-I – Hubble Space Telescope, Cycle 23, PI – L. Wang (Texas A&M)	2015-2017
UNDERSTANDING THE PROGENITOR SYSTEMS, EXPLOSION MECHANISMS, AND COSMOLOGICAL UTILITY OF TYPE IA SUPERNOVAE Co-I – Hubble Space Telescope, Cycle 22, PI – R. Foley (U. Illinois)	2014-2015
TESTING THE STANDARDIZABILITY OF TYPE IA SUPERNOVAE WITH THE CEPHEID DISTANCE OF A TWIN SUPERNOVA Co-I – Hubble Space Telescope, Cycle 22, PI – R. Foley (U. Illinois)	2014-2015
POLARIMETRY OF SN 2014J IN M82 AS A PROBE OF ITS DUSTY ENVIRONMENT Co-I – Hubble Space Telescope, Cycle 22, PI – L. Wang (Texas A&M)	2014-2015
SURVEY USING DECAM FOR SUPERLUMINOUS SUPERNOVAE (SUDSS) Co-I	2014-2015
SLOAN DIGITAL SKY SURVEY II: SUPERNOVA SURVEY EXT. COLLABORATOR	2009-2011

	SLOAN DIGITAL SKY SURVEY III: BARYON OSCILLATION SPEC. SURVEY	2009-2012
	SWIFT SCIENCE/ULTRAVIOLET OPTICAL TELESCOPE INSTRUMENT TEAMS	2004-present
Teaching Experience	ASTR111 — Visiting Associate Professor, Texas A&M Teaching “Overview of Modern Astronomy” using the free, online Open Stax Astronomy textbook and training the graduate students teaching the lab portion. This was an in-person class until spring break, online via zoom afterward due to the COVID19 pandemic.	Spring 2020
	ASTR101 — Visiting Assistant Professor, Texas A&M Taught “Basic Astronomy” ASTR101 to a class of 104 students using The Essential Cosmic Perspective with Pearson online homework along with self-made observing and self-reflection projects.	Spring 2018
	CIRTL Associate, Texas A&M Certification as a Center for the Integration of Research, Teaching, and Learning Associate for participation in An Introduction to Evidence-Based Undergraduate STEM Teaching MOOC	Summer 2018
	ASTR111 — Lab Coordinator, Texas A&M Supervised the graduate student assistants teaching the ASTR111 labs, trained in the lab instruction, taught labs as needed, updated lab manuals, tested telescopes, and other equipment, coordinated class schedules with department and instructors	2015-2016
	Substitute/Guest Instructor, Texas A&M, Penn State University, U. of Utah, Utah Valley State College Substituted or gave guest lectures for large undergraduate classes in physics and astronomy	2004-2017
	Teaching Assistant, Pennsylvania State University 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	Fall 2004
	Teaching Assistant, Brigham Young University 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	2003 – 2004
Mentoring Experience	Recipient of 2017 Texas A&M College of Science Undergraduate Research Mentoring Award	
	Team Leader and Core Facilitator in DeBakey Leadership Program Spring 2020	
	“Faculty” mentor in Aggie Research Program 2019-2020	
	Team leader in Aggie Research Program 2017-2020	
	Certification as an Aggie Research Leader Spring 2017	

Mentored Undergraduate (UG: >40) and Graduate (G:8) Students

Graduate students were formally advised by their faculty advisor but mentored by Dr. Brown

- Gesa Chen (G: Fall 2020 – current) – theoretical modeling of Type Ia UV spectra from HST
- Yaswant Devarakonda (G: Fall 2020–current) – PCA fitting of type Ia supernova light curves
- Mikayla Cleaver (G: Summer 2020–current) – Ultraviolet spectroscopy of type II supernovae
- Aggienova Team (UG: Fall 2020 virtual) Mahir Pirmohammed, Emily Sarria, Alexander Crabtree, Landon Holcomb – Various projects related to the Swift SN program and Aggienova templates
- Emily Sarria (UG: Summer 2020) – Reducing Swift supernova grism observations
- Mahir Pirmohammed (UG: Summer 2020) – Supernova templates and website
- Aggienova Team (UG: Spring 2020) Emily Sarria, Katherine Guo, Will Robinson, Christopher Lopez, Stanley Johnson, Nandini Janapati, Avi Subramanian – Comparing Swift UVOT photometry of SN2018hna to International Ultraviolet Explorer spectra of SN1987A
- Aggienova Template Research Team (UG: Spring 2020) “Faculty” advisor to undergraduate team leader Tate Walker with Akash Gajendra, Mahir Pirmohammed, Andrew Chang, and Mark Rios – Continued work on the AggieNova spectral template series
- Aggienova Template Research Team (UG: Fall 2019) “Faculty” advisor to undergraduate team leader Tate Walker with Akash Gajendra, Drager Landry, Jennifer Martin, Mahir Pirmohammed, and Noah Sharp – Continued work on the AggieNova spectral template series
- Nicole Crumpler (UG/REU: 2019) – Independent check of Swift/UVOT calibration using supernova fields. Also coauthored a paper together on the lack of correlation between supernova colors and host galaxy properties.
- Aggienova SOUSA Research Team (UG: Spring 2019) Brent Loving, Yung-Hsin, Kelli Templeton, Kevin Kuriachan, Ariel McClain – creating, visualizing, and working with light curves for the Swift Optical Ultraviolet Supernova Archive
- Aggienova Template Research Team (UG: Spring 2019) Tate Walker, Nathan Mandell, Emily Hay, Shea Kirwin, Zuhary Ali – Creating the AggieNova spectral template series pipeline
- Aggienova Swift Research Team (UG: Spring 2019) Mahir Pirmohammed, Sean Waters, Ali Khowaja, Leah Tomotaki, Zaal Buhariwalla – processing and instagramming Swift images
- Tate Walker (UG: 2017-current) – contamination of reddening maps by nearby galaxies
- Tiffany Lee (UG: Fall 2018) – documentation of existing UV samples
- Katya Leidig (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 and supernova color phototyping
- Sarah Walker (UG/REU: 2017) – UVOT photometry and SN Ia light curve fitting
- 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: 2014-2017) – 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 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

Service	ORGANIZING COMMITTEE, TEXAS A&M ASTRONOMY SYMPOSIUM	2012-2020
	ORGANIZER, DIMEBOX INSTITUTE FOR SUPERNOVA ASTROPHYSICS Coordinate meetings amongst researchers at Texas A&M, the U. of Texas, UT-San Antonio, UT-Arlington, Southern Methodist U., Texas Tech, and Southwest Research Institute.	2013-2015
	REFEREE – ASTROPHYSICAL JOURNAL, MNRAS, NATURE	2013-current
	CHAIR OF A NASA PROPOSAL REVIEW COMMITTEES	
	MEMBER OF MULTIPLE NSF PROPOSAL REVIEW COMMITTEES	
	MEMBER OF MULTIPLE NASA PROPOSAL REVIEW COMMITTEE	
	GRADUATE STUDENT REPRESENTATIVE ON GRADUATE PROGRAM COMMITTEE, PENNSYLVANIA STATE UNIVERSITY Represented students in issues of curriculum, recruiting, and compensation.	2007 – 2009
Outreach	COORDINATOR FOR SUMMER READING PROGRAM AT BRYAN/COLLEGE STATION PUBLIC LIBRARIES, TEXAS A&M Organizing panel discussions of astronomers and helping suggest programming ideas for a variety of ages and interests. Obtained internal funding for and led telescope-building classes for community members aged 3-73.	2019
	PHYSICSFEST VOLUNTEER, TEXAS A&M Described the process of supernova hunting to enthusiastic visitors Assisted visitors in creating their own colorful astronomical images	2012 – 2019
	SPECIAL GUEST SPEAKER, PENNSYLVANIA, UTAH, TEXAS Talk about astronomy to school classes and amateur astronomy groups	2009-2012
	BOY SCOUTS OF AMERICA VOLUNTEER Taught a class from the new STEM NOVA program Led a star party for summer camp instructors to teach them how to teach astronomy	2015 – 2016
	ASTROFEST VOLUNTEER, PENNSYLVANIA STATE UNIVERSITY Assisted with roof top observing, discussed Swift satellite, and gave public talks – “The Swift Gamma Ray Burst Explorer” and “My Trip to Mars”	2005 – 2008
	PLANETARIUM PRESENTER, ROOFTOP OBSERVING GUIDE, BRIGHAM YOUNG UNIVERSITY Gave public presentations in the planetarium and assisted with roof top observing	2002 – 2004
Honors	Postdoctoral Research Symposium Distinguished Flash Talk Presentation 2nd place	2018
	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**

15 YEARS OF SWIFT SUPERNOVA EXPLOSIONS
HEAD II Special Session: Explosive Science: 15 Years of Discovery with Swift
237th AAS meeting, Virtual, January 12, 2021

INVITED POSTER: AGGIENOVA: RISING STAR STUDENTS STUDYING EXPLODING STARS
High Impact Teaching Practices
Texas A&M University, College Station, Texas, February 18, 2020

MEASURING THE UNIVERSE WITH EXPLODING STARS
Texas State University Department of Physics seminar
San Marcos, Texas, March 25, 2019

WHEN STARS EXPLODE
Brigham Young University Physics & Astronomy Colloquium
Provo, Utah, January 14, 2019

THE PAST, PRESENT, AND FUTURE OF ULTRAVIOLET SUPERNOVA OBSERVATIONS
Southwest Research Institute invited seminar
San Antonio, Texas, October 11, 2018

EARLY ULTRAVIOLET OBSERVATIONS OF SUPERNOVAE WITH SWIFT
Time Domain Astrophysics with Swift III Conference
Clemson, October 2, 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 Colloquium
Reno, Nevada, USA, January 26, 2018

UNDERSTANDING ASTRONOMERS' TOOLS
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

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

**Collaboration
and
Contributed
Talks and
Posters**

POSTER: HOW WELL DO YOU KNOW THE LINE-OF-SIGHT MILKY WAY REDDENING TO THAT
NEARBY GALAXY?

AAS Meeting, Virtual, January 2021

POSTER: SWIFT OBSERVATIONS OF NEARBY SUPERNOVAE IN THE ULTRAVIOLET
The extragalactic explosive Universe: the new era of transient surveys and data-driven discovery
European Southern Observatory, Munich, Germany, September 16-19, 2019

POSTER: ULTRAVIOLET SEDS AND BOLOMETRIC LUMINOSITY
Enabling Multi-Messenger Astrophysics in the Big Data Era
Space Telescope Science Institute, Baltimore, Maryland, April 25-26, 2019

POSTER: ULTRAVIOLET DIVERSITY OF STANDARD CANDLES
The Deaths and Afterlives of Stars
Space Telescope Science Institute, Baltimore, Maryland, April 22-24, 2019

POSTER: ULTRAVIOLET-BRIGHT SUPERNOVAE
Shocking Supernovae
Stockholm, Sweden, May 2018

RED OR REDDENED? ULTRAVIOLET COLORS OF TYPE IA SUPERNOVAE
Supernova group seminar
Stockholm, Sweden, May 25, 2018

ULTRAVIOLET DIVERSITY OF TYPE IA SUPERNOVAE
Mitchell Workshop / Carnegie Supernova Project Team Meeting
Cook's Branch Nature Conservancy, Texas, April 4, 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

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

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

SWIFT ULTRAVIOLET OBSERVATIONS OF SUPERNOVAE
 Texas Joint APS-AAPT-SPS Meeting
 College Station, TX, Oct 18, 2014

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

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

* indicates mentored student

19. GALAXIAN CONTAMINATION OF GALACTIC REDDENING MAPS
Brown, P. J. & *Walker, T., 2020, AJ, submitted
18. A PHOTOMETRIC ANALYSIS OF THE RELATIONSHIP BETWEEN THE UV FLUX OF TYPE IA SUPERNOVAE AND HOST-GALAXY METALLICITY
Brown, P. J. & *Crumpler, N. R., 2020, ApJL, 872, 30
17. RED AND REDDENED: ULTRAVIOLET THROUGH NEAR-INFRARED OBSERVATIONS OF TYPE IA SUPERNOVA 2017ERP
Brown, P. J., Hosseinzadeh, G., Jha, S., et al. 2019, ApJ, 877, 152
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, 867, 1
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

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