

Julie N. Skinner

INSTITUTE FOR ASTROPHYSICAL RESEARCH
BOSTON UNIVERSITY
725 COMMONWEALTH AVE, CAS 403
BOSTON, MA 02215
JSKINNER@BU.EDU
PEOPLE.BU.EDU/JSKINNER

EDUCATION

Dartmouth College **Ph.D. in Physics & Astronomy, 2014**
Hanover, New Hampshire

Dissertation: *Cataclysmic Variables and White Dwarf-M Dwarf Binaries from the SUPERBLINK Proper Motion Survey*

Advisor: John R. Thorstensen

Co-advisor: Sébastien Lépine (Georgia State University)

University of Oklahoma **B.S. in Astrophysics, 2007**
Norman, Oklahoma

Thesis: *Detailed Photoionization Modeling of the Halo Planetary Nebula DdDm1*

Advisor: R.B.C. Henry

POSITIONS & FELLOWSHIPS

Postdoctoral Associate, Boston University 2014-present

Supervisor: Philip S. Muirhead (2016-2018), Andrew West (2014-2016)

Graduate Research, Dartmouth College 2007-2014

Advisor: John Thorstensen

Graduate Fellow for Professional Development Programs 2013-2014

Dartmouth Center for the Advancement of Learning (DCAL)

NSF Graduate STEM Fellow in K-12 Education 2010-2011

TELESCOPE TIME AWARDED

Activity and Planets at the Bottom of the Main Sequence Co-I, K2 Cycle 2

Science PI, K2 Cycle 4 (\$40k)

Science PI, K2 Cycle 5 (\$50k)

Parallaxes of Very Low-Mass Stars 4.3m Discovery Channel Telescope

22 nights

Lowell Observatory

Metallicities of M Dwarfs with White Dwarf Companions NASA Infrared Telescope Facility

1.5 nights

Spectroscopy & Photometry of Cataclysmic Variables and White Dwarf-M Dwarf Binaries

81 nights

2.4m Hiltner Telescope, MDM Observatory

34 nights

1.3m McGraw-Hill Telescope, MDM Observatory

HONORS & AWARDS

Honorable Mention, Poster Competition, Cool Stars 19 2016

"DCT Astrometry of Very Low-Mass Stars" (6 total awardees out of >350 posters)

Chair's Teaching Award, Dept. of Physics & Astronomy, Dartmouth College 2013

Astronomy Ambassador, American Astronomical Society 2013

NSF Graduate STEM Fellow in K-12 Education 2011

Undergraduate Research Grant, Honors College, Univ. of Oklahoma 2006
 J. Clarence Karcher Scholarship, Dept. of Physics & Astronomy, Univ. of Oklahoma 2006
 Recognition for Meritorious Scholarship, Dept. of Physics & Astronomy, U. of Oklahoma 2004, 2005, 2007
 Oklahoma Academic Scholar (Full Tuition), Univ. of Oklahoma 2003

TEACHING, MENTORING, & OUTREACH

Mentor, Sheila Saguear, Boston University Undergraduate 2016-2017

Co-Instructor, “*From the Big Bang to Humankind*”, Tufts University Spring 2016
Taught origin of the elements and exoplanet systems for cross-disciplinary non-majors course

Co-founder & Director, Boston Univ. Women in Astronomy Lunch Assoc. 2015-present
Created and now direct a cross-hierarchical mentoring group for women in the BU Dept. of Astronomy

Associate Director, Boston University NSF REU Program 2015-2016
Coordinated research and career development seminars for REU student cohort

Workshop Facilitator, Dartmouth Center for the Advancement of Learning 2013-2014
Led workshops on teaching & learning for graduate students and postdocs. Selected topics include Collaborative Learning Techniques, Difficult Situations as a TA, Answering Controversial Questions

Lab Instructor, Dartmouth College 2007-2013
Taught undergraduate laboratory sessions of 10-15 students each. Classes included Exploring the Universe (Intro. Astronomy), Introductory Physics II (E&M), Observational Techniques

Teaching Assistant, Dartmouth College 2007-2013
Taught undergraduates in recitation-style office hours with example problems and assisted with homework problems. Classes included Stars and the Milky Way, High Energy Astrophysics

Developer & Instructor, Observational Astronomy March Intensive, Hanover High School March 2013
Developed and instructed a short course for high school students alongside two high school teachers. Students learned about astronomical imaging and spectroscopy and manipulated their own data

MDM Observatory Observing Mentor Various
Trained undergraduate students in observing techniques. Students observed with me and independently.

NSF Graduate STEM Fellow in K-12 Education, Hanover, NH 2010-2011
“Resident Scientist” & Instructor in 8th grade physical science course

Mentor, Dartmouth Women’s Mentoring Group Coordinator, 2010-2011
Mentor to High School girls from school-in-need 2009-2010

Instructor, Montshire Museum of Science 2008-2013
Engaged preschoolers in the scientific method

Public Talks & Demonstrations 2007-present
Science by the Pint, Middle School Science Cafes, Night Sky Tour at Hanover Town Library, McAuliffe-Shepard Discovery Center Summer Camps & Teen Night, Montshire Museum of Science Earth & Space Day, USA Science & Engineering Festival

INVITED TALKS

Talk, Special Session: Science with the Discovery Channel Telescope and Beyond, AAS #229, Jan 2017
“Proper Motions and Parallaxes of Very Low-Mass Stars using DCT Astrometry”

Colloquium, Institute for Astrophysical Research, Boston University, Sept 2016
“Understanding the Solar Neighborhood through a Triptych of Low-Mass Star Populations”
 Seminar, Dept. of Physics, UMass Lowell, June 2016
“Magnetic Activity of Nearby White Dwarf-M Dwarf Binaries”
 Seminar, Harvard-Smithsonian CfA Small Scale Phenomena, May 2016
“DCT Astrometry of Very Low-Mass Stars”
 Seminar, Harvard-Smithsonian CfA Exoplanet Lunch, April 2016
“Magnetic Environments around Solar Neighborhood White Dwarf-M Dwarf Binaries”
 Seminar, Carnegie Dept. of Terrestrial Magnetism, May 2015
“Understanding the Solar Neighborhood through a Triptych of Low-Mass Star Populations”

PROFESSIONAL SERVICE

Referee, AAS Journals	2014-present
Organizer, BU Lunch Seminar	2015
Future Faculty Advisory Board, Dartmouth Center for the Advancement of Learning	2009-2014
Coordinator, Astronomy Journal Lunch, Dartmouth College	2012-2013
Physics & Astronomy Representative, Dartmouth Graduate Student Council	2009-2010

PROFESSIONAL SOCIETIES

American Astronomical Society

SELECTED PROFESSIONAL DEVELOPMENT

Participated in numerous workshops on teaching associated with NSF GK-12 program, DCAL <i>Principles of Learning, Collaborative Learning Techniques, Critical Moments & Diversity, Enhancing Scientific Creativity</i>	2010-2011
Presenter, New England Faculty Development Consortium Conference	Fall 2008

REFEREED PUBLICATIONS

Julie N. Skinner, Dylan P. Morgan, Andrew A. West, Sébastien Lépine, John R. Thorstensen
Activity and Kinematics of White Dwarf-M Dwarf Binaries from the SUPERBLINK Proper Motion Survey
 The Astronomical Journal, accepted

John R. Thorstensen, Cynthia J. Taylor, Christopher S. Peters, **Julie N. Skinner** et al.
Spectroscopic Orbital Periods for 29 Cataclysmic Variables from the Sloan Digital Sky Survey
 The Astronomical Journal, Vol. 149, Issue 4, article id. 128 (2015)

Julie N. Skinner, John R. Thorstensen, Sébastien Lépine
Cataclysmic Variables in the SUPERBLINK Proper Motion Survey
 The Astronomical Journal, Vol. 148, Issue 6, article id. 115 (2014)

John R. Thorstensen, **Julie N. Skinner**
Spectroscopy and Photometry of Cataclysmic Variable Candidates from the Catalina Real Time Survey
 The Astronomical Journal, Vol. 144, Issue 3, article id. 81 (2012)

S. Vennes, J.R. Thorstensen, A. Kawka, P. Németh, **J. N. Skinner** et al.
Discovery of a Bright, Extremely Low Mass White Dwarf in a Close Double Degenerate System
 The Astrophysical Journal Letters, Vol. 737, Issue 1, article id. L16 (2011)

Julie N. Skinner, John R. Thorstensen, Eve Armstrong, Steve Brady
The New Eclipsing Cataclysmic Variable SDSS 154453+2553
 Publications of the Astronomical Society of the Pacific, Vol. 123, issue 901, pp. 259-262 (2011)

John R. Thorstensen, Christopher S. Peters, **Julie N. Skinner**
Optical Studies of 20 Longer-Period Cataclysmic Binaries
Publications of the Astronomical Society of the Pacific, Vol. 122, Issue 897, pp1285-1302 (2010)

R.B.C. Henry, K.B. Kwitter, R.J. Dufour, **J.N. Skinner**
A Multiwavelength Analysis of the Halo Planetary Nebula DdDm-1
The Astrophysical Journal, Vol. 680, Issue 2, pp. 1162-1173 (2008)

SELECTED MEETING ABSTRACTS

Julie N. Skinner, Dylan P. Morgan, Andrew A. West, John R. Thorstensen, Sébastien Lépine
Activity and Kinematics of Solar Neighborhood White Dwarf-M Dwarf Binaries
The 19th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun DOI 10.5281/zenodo.163437 (2016)

Julie N. Skinner, Andrew A. West, Jacqueline K. Faherty, Philip S. Muirhead
DCT Astrometry of Very Low-Mass Stars
The 19th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, DOI 10.5281/zenodo.163442 (2016)

Julie N. Skinner, Dylan P. Morgan, John R. Thorstensen, Sébastien Lépine
White Dwarf-M Dwarf Binaries in the Solar Neighborhood
American Astronomical Society, AAS Meeting #227, (2016)

Julie N. Skinner, John R. Thorstensen, Sébastien Lépine
Results from a Search for Nearby Cataclysmic Variables and Related Objects
American Astronomical Society, AAS Meeting #221, #148.05 (2013)

Julie N. Skinner, J. Thorstensen, S. Lépine
First Results from a Search for Nearby Cataclysmic Variables and Related Objects
American Astronomical Society, AAS Meeting #218, #127.10 (2011)

Julie Skinner, John Thorstensen, Eve Armstrong & Steve Brady
The Eclipsing Cataclysmic Variable SDSS 154453+2553
14th North American Workshop on Cataclysmic Variables & Related Objects, Poster #51, (2009)

John R. Thorstensen, C.S. Peters, H.A. Sheets, **J.N. Skinner**
New Orbital Periods for Seven Cataclysmic Variable Stars
American Astronomical Society, AAS Meeting #213, #491.07 (2009)

J.N. Skinner, R.B.C. Henry, K.B. Kwitter, R.J. Dufour
A Multiwavelength Abundance Analysis of the Halo Planetary Nebula DdDm-1
American Astronomical Society, AAS Meeting #211, #100.12 (2007)

TELEGRAMS & ANNOUNCEMENTS

D. Milisavljevic, G.H. Marion, E. Y Hsiao, A. Soderberg, R. Margutti, M. Drout, N. Sanders, P. Challis, R. Kirshner, R. Chornock, R. Foley, and **J. Skinner**
Optical and near-infrared spectroscopy of SN 2013ak (=PSN J08070669-2803101)
The Astronomer's Telegram, #4943, Apr. 2013

J.P. Halpern, **Julie Skinner**
Outburst spectroscopy of Swift J1922.7-1716 and Optical Imaging in Quiescence
The Astronomer's Telegram, #3742, Nov. 2011