

Jennifer Lynn Cash

Professor of Physics, South Carolina State University

a. Professional Preparation:

Univ. of Wyoming Physics B.S., 1994
Univ. of Wyoming Physics PhD., 2002
Dissertation: *Modeling the Accretion Stream in Polars*

b. Appointments:

Professor of Astrophysics, South Carolina State Univ. 2014-present
Associate Professor of Astrophysics, South Carolina State Univ., 2008-2014
Assistant Professor of Astrophysics, South Carolina State Univ., 2002 – 2008
Instructor, Univ. of Wyoming, 2001-2002

c. Related Products:

- Cash, J., Howell, S., and Walter, D., *A Long Term Photometric and Spectroscopic Study of RV Tauri Stars*, 2009, in "Stellar Pulsations: Challenges for Theory and Observation", AIP Conf. Proceedings, 1170, 146.
- Cash, J., *Computational Models of the Accretion Streams in Polars*, 2004, in "Magnetic Cataclysmic Variables", ASP Conf. Series, 315, 272.
- Cash, J., *Modeling the Accretion Stream in Polars*, 2003, PASP, 115, 1150.
- Harrison, T., Howell, S., Huber, M., Osborne, H., Holtzman, J., Cash, J., Gelino, D., *Modeling the Remarkable Multiwavelength Light Curves of EF Eridanus: The Detection of Its Irradiated Brown Dwarf-like Secondary Star*, 2003, AJ, 125, 2609.
- Cash, J. and Howell, S., *Model Accretion Streams in Polars*, 2002, in *The Physics of Cataclysmic Variable and Related Objects*, ASP Conf. Series, 261, 141.

Other Significant Products:

- Howell, S., Cash, J., Mason, K., and Herzog, A., *The Relationship between Ultraviolet Line Emission and Magnetic Field Strength in Magnetic Cataclysmic Variables*, 1999, AJ, 117, 1014.
- Johnson, P., Deromedi, A., Lebaron, P., Catala, P., and Cash, J., *Rapid Detection and Enumeration of Escherichia coli in Aqueous Samples using Fountain Flow Cytometry*, 2006, Cytometry Part A, 69A, 1212.
- Cash, J. and Dahnovsky, Y., *Driven electron transfer in an environment with slow and fast degrees of freedom*, 2001, Physical Review E, 63, 016104.
- Howell, S., Ciardi, D., Szkody, P., VanParadijs, J., Kuulkers, E., Cash, J., Sirk, M., and Long, K., *Multiwavelength Superoutburst Observations of T Leonis*, 1999, PASP, 111, 342.

Synergistic Activities:

- Mentoring Coordinator/CoPI for “Partnership in Observational and Computational Astronomy”, NSF PAARE grant (2008-current)
- Campus Director for South Carolina Space Grant Consortium on the SC State Campus (2005-current)
- Education and Public Outreach for NASA Kepler Mission through NASA/EPSCoR Joint Venture Project (2012-current)
- PI on Kepler Cycle 4 Guest Observer Award and Co-PI on Kepler Cycle 2 Guest Observer Award, responsible for data analysis (2011-current)
- Project Manager/PI for “Enhancing Diversity in the Geosciences: Mentoring and Research Modeling for Middle School and University Students”, NSF OEDG grant (2007-2009)

Collaborators & Other Affiliations:Organizations:

Member: American Astronomical Society

Collaborators: (last 48 months)

Wagih Abdel-Kader (SC State Univ)
Jim Bottum (Clemson University)
Sean Brittain (Clemson University)
Emma Caldwell (SC State University)
Mitch Colgan (College of Charleston)
Tyshawn Colter (OCtech)
Shadia El-Teleaty (SC State Univ)
Jill Gemmil (Clemson University)
Alan Gould (University of California)
Cynthia Hall (College of Charleston)
Deiter Hartmann (Clemson University)
Albert Hayward (SC State University)
Kenneth Hinkle (NOAO)
Steve Howell (NASA Ames)
James Keller (SC State University)
Jeremy King (Clemson University)

Mark Leising (Clemson University)
Elizabeth Mayo (SC State University)
Sam McDonald (SC State University)
Richard Murphy (OCtech)
Kenneth Mighell (NOAO)
J. Barr von Oehsen (Clemson University)
James Payne (OCtech)
Cass Runyon (College of Charleston)
Dan Smith (SC State University)
Ronald Speight (SC State University)
Martn Still (NASA Ames)
Matthew Templeton (AAVSO)
Don Walter (SC State University)
Reginald Williams (SC State University)
Gloria Winkler (SC State University)

Graduate Advisor: Steve Howell, NASA Ames

Jennifer Cash Served as Thesis Advisor or Postdoctoral Sponsor to: No One