

# Kristen Dage

## Curriculum Vitæ

Graduate Student  
Dept. of Physics and Astronomy  
Michigan State University  
East Lansing, MI 48824

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<https://kcdage.github.io/>

### Education

- 2015 - present Ph.D. Astronomy and Astrophysics  
Michigan State University, East Lansing, MI  
Advisor: S.E. Zepf
- 2015 - 2017 M.S. Astronomy and Astrophysics  
Michigan State University, East Lansing, MI
- 2012 - 2014 B.S. Physics  
University of Michigan-Dearborn, Dearborn MI

### Teaching and Mentoring Experience

- 2018- Supervising MSU undergraduate Omid Noroozi's project of searching for long and short term variability of ultraluminous X-ray sources in globular clusters.
- 2018 Astronomy Instructor - GUPPY (Gifted University for Parents and Precocious Youth)  
Designed curriculum and instructed a class for 5th-6th graders through MSU's Gifted and Talented Education program. (June 30-July 1), East Lansing, MI
- 2018 Institute for Scientist & Engineer Educators Professional Development Program (ISEE PDP).  
I am working with a team based out of Univ. South Carolina to backwards design a class on transiting exoplanets for an introductory astronomy class. Monterey, CA
- 2015 - 2018 Teaching assistant  
ISP 205L -Visions of the Universe  
Michigan State University, East Lansing, MI
- 2011 - 2014 Math, Physical Sciences Tutor  
Academic Support Center  
Oakland Community College, Farmington Hills, MI

### Awards

- 2014 Outstanding Physics Student *Dept. Natural Sciences, University of Michigan-Dearborn*

### Accepted Proposals

Chandra Cycle 20: "*The Nature of the Two Globular Cluster ULXs in the Galaxy NGC 4472*". Awarded 90 ks time.

### Professional Presentations

- 2018 Aug International Centre for Radio Astronomy Research (Perth, Australia), Colloquium Talk
- 2018 Aug Chandra Accretion Workshop (Cambridge, MA), Poster presentation
- 2018 Apr Compact Objects in Michigan 6 (Ann Arbor, MI), Contrib. Talk
- 2018 Mar HEAD Special Meeting on High Energy Astrophysics in the 2020s and Beyond (Rosemont, IL), [Poster presentation](#)
- 2017 Mar Compact Objects in Michigan 5 (East Lansing, MI), Contrib. Talk
- 2017 Feb Gemini South Observatory, (La Serena, Chile), Colloquium Talk
- 2017 Jan 229th American Astronomical Society meeting (Grapevine, TX), Poster presentation
- 2014 Nov Annual Physics Undergrad Research Conference at Wayne State University (Detroit, MI), Poster presentation
- 2014 Jun 218th American Astronomical Society meeting (Boston, MA), [Poster presentation](#)
- 2014 Apr Compact Objects in Michigan 3 (East Lansing, MI), Contrib. Talk

## Public Outreach Activities

2018	Public talk on history of astronomy for Astronomy on Tap, Lansing MI ( <a href="#">slides</a> )
2018	MSU Science Festival Expo Days (Primary Astronomy Organizer), East Lansing, MI
2017	Public talk for Capital Area Astronomy Association, East Lansing, MI
2017	Public talk on observing in Chile for Astronomy on Tap, Lansing MI ( <a href="#">slides</a> )

## Publications

### Refereed

1. **K. C. Dage**, S. E. Zepf, A. Bahramian, A. Kundu, T. J. Maccarone, M. B. Peacock, “*X-ray variability from the ultraluminous black hole X-ray binary in the globular cluster RZ 2109*”, 2018, [The Astrophysical Journal](#), [Accepted](#).
2. **K.C. Dage**, W.I. Clarkson, P.A. Charles, S. Laycock, I-C. Shih “*A search for spin-superorbital period correlation in SMC X-1*”, 2018, MNRAS, submitted.
3. M. A. Tucker, B. J. Shappee, T. W.-S. Holoien, K. Auchettl, J. Strader, K. Z. Stanek, C. S. Kochanek, A. Bahramian, Subo Dong, J. L. Prieto, Todd A. Thompson, John F. Beacom, L. Chomiuk, L. Denneau, H. Flewelling, A. N. Heinze, K. W. Smith, B. Stalder, J. L. Tonry, H. Weiland, A. Rest, M. E. Huber, D. M. Rowan, **K. Dage** “*ASASSN-18ey: The Rise of a New Black-Hole X-ray Binary*” 2018, ApJ, [submitted](#).
4. **K.C. Dage**, S.E. Zepf, M.B. Peacock, O. Noroozi, A. Bahramian, A.Kundu, T.J. Maccarone, “*Spectral Variability of Ultraluminous X-Ray Sources in Extragalactic Globular Clusters*”, 2018 (in prep)

### Unrefereed

1. **Dage, K. C.**; Zepf, S. E.; Strader, J.; Dimitriadis, G.; Foley, R. J.; Kilpatrick, C. D.; Jones, D. O.; Rojas-Bravo, C. “*Spectroscopic Classification of SN 2018agk with SOAR/Goodman*”, 2018, The Astronomer’s Telegram, No. 11433
2. Bahramian, A.; Strader, J.; **Dage, K.**, “*SOAR/Goodman optical spectroscopy of MAXI J1820+070*”, 2018, The Astronomer’s Telegram, No. 11424

## Leadership

- 2017- Mentor for REU students and incoming graduate students through MSU’s WAMPS (Women and Minorities in Physical Sciences).
- 2016- Organizer of MSU astronomy dept. journal discussion group.

## Experience and Analysis Skills

- X-ray spectroscopy, imaging analysis (*Chandra*, *XMM-Newton*, *RXTE*)
- Optical spectroscopy analysis (*SOAR/GHTS*, *Gemini/GMOS*)
- Conducting optical observations (*SOAR* observatory)
- Programming: Python, Mathematica
- Major astronomical packages: AstroPy, CIAO, HEASoft (XSpec, FTools), IRAF