

Christopher T. Britt

christopher.britt@ttu.edu

www.phys.ttu.edu/~cbritt

(225) 229-6010

Education

Bachelor of Science degree (2008), Louisiana State University

- *Major: Physics with Astronomy concentration*
- *Minor: Mathematics*

Ph.D. (2013) in Physics, Louisiana State University

Post-doctoral Fellow in Department of Physics, Texas Tech University (2013-present)

Invited Talks

University of Michigan, Dearborn Astronomy Seminar, Fall 2016

University of Delaware Astronomy Seminar, date TBD

American Museum of Natural History Astronomy Seminar, April 2014

Texas A&M University Astronomy Seminar, October 2013

Professional Service

Chandra X-ray Observatory Time Allocation Committee member for Cycle 17

LSST Stars, Milky Way, & Local Volume working group member 2015-present. Chair of

“Development of algorithms to select stellar tracers of different stellar populations - both variable and static” session in LSST Milky Way working group meeting, Oct 2015

LSST “Science Driven Optimization of the LSST Observing Strategy” White Paper contributor

Observing Experience

Lead Observer present for:

- McDonald Observatory
Telescope: Otto Struve 82”. Instrument: CQUEAN. 4 nights, August 2014
- CTIO, NOAO Proposal ID #2012-A0424
Telescope: SMARTS 0.9m at CTIO. Instrument: Tek2K. 7 nights, June 2012
- Las Campanas Observatory
Telescope: Henrietta Swope Telescope at LCO. Instrument: SITe#3. 7 nights, June 2011
- CTIO, NOAO Proposal ID #2011-A0432
Telescope: YALO 1m at CTIO. Instrument: Y4KCam. 7 nights, June 2011

Assisting Observer for:

- CTIO, NOAO Proposal ID #2010-A0410
Telescope: Blanco 4m at CTIO. Instrument: Mosaic-II. 8 nights, July, 2010
- McDonald Observatory
Telescope: Otto Struve 82 in. Instrument: Argos. 14 nights, May, 2009

Outreach

Organized monthly “Science on Tap” and “Bad Science” Movie nights at Alamo Drafthouse Movie Theatre, 2015-2016.

Assistant Moderator and Astronomy panelist of reddit.com/r/AskScience, an online community with over 6.7 million subscribers. 2013-present

Led star parties for Boy Scout and Girl Scout groups, 2014-2015

Operator at the Landolt Astronomical Observatory for public viewing nights, 2012-2013

Operator at Highland Road Park Observatory for public viewing nights, 2012-2013

Led other graduate students in organizing monthly science talks, 2011-2012

Assisted in organizing monthly science talks for local high school students by researchers in various scientific fields, 2008-2011

Teaching

Instructor for 180 student lecture course Astronomy 1400 – Solar System Astronomy at Texas Tech University in Fall, 2014.

Mentored both undergraduates and graduate students in research projects at Texas Tech University, 2013-2015

Center for Astronomy Education Workshop attended at 219th AAS meeting in Austin, TX

Awards and Scholarships

Louisiana Board of Regents Fellowship

Louisiana Space Consortium (LaSPACE) Graduate Student Research Assistance

First Authorships

Papers:

“The relationship between X-ray luminosity and duty cycle for dwarf novae and their specific frequency in the inner Galaxy” Britt et al. 2015, MNRAS, 448, 3455

“Photometry of Optical Counterparts of X-ray Sources in the Galactic Bulge Survey”, Britt, C. T., Hynes, R. I., Johnson, C. B., et al. 2014, ApJS, 214, 10B

“New Interacting Binaries in the Galactic Bulge Survey”, Britt, C. T., Torres, M. A. P., Hynes, R. I., et al. 2013, ApJ, 769, 120

“Lone Star: Discovery of an Outbursting Young Star Far from a Star Forming Region”, Britt, C. T., Maccarone, T. J., Green, J. D., et al. Submitted to MNRAS.

“Mass Determination of Optical Counterpart to CXO-GBS J174601.2-311224: an Extremely Short Period, Eclipsing, near-Roche Lobe filling RS Cvn”, Britt et al. In preparation for submission to MNRAS.

“Reprocessing of X-ray Light by the Accretion Disk and its Relation to X-ray Spectral State in Scorpius X-1”, Britt et al. In preparation for submission to ApJ.

Conference Proceedings:

“The Variable Sky near the Galactic Plane” Britt, C. T. & Maccarone, T. J. 2015, LSST Milky Way Working Group Meeting, Steward Observatory

“The Chandra Galactic Bulge Survey” Britt, C. T., Maccarone, T. J., Jonker, P. G. et al. 2015 Milky Way Astrophysics from Wide-Field Surveys, Royal Astronomical Society

“An Isolated Forming Star in the Galactic Bulge Survey”, Britt, C. T., Maccarone, T. J., Green, J. D., 2014 AAS HEAD, 14, #119.04

“Dwarf Novae in the Galactic Bulge Survey – Observational Constraints on X-ray/Recurrence Time Relations and Space Density”, Britt, C. T., Maccarone, T. J., Hynes, R. I. et al. 2014 American Astronomical Society Meeting Abstracts #223, 223, #155.33

“The Chandra Galactic Bulge Survey”, Britt, C. T., Hynes, R. I., Jonker, P. G. et al. 2013 Astronomical Society of the Pacific Conference Series, CTIO 50th Anniversary Conference.

“Variability of Optical Counterparts in the Galactic Bulge Survey”, Britt, C. T., Hynes, R. I., Johnson, C. B. et al. 2013 American Astronomical Society Meeting Abstracts #221, 221, #421.01

“Variability of Optical Counterparts in the Galactic Bulge Survey”, Britt et al. 2012, xrb confE, 7B

“New Interacting Binaries Identified by the Chandra Galactic Bulge Survey”, Britt et al. 2012, AAS, 21915303B

“Echomapping Sco X-1”, Britt et al. 2010, HEAD, 11.4213B

Accepted Proposals:

“X-ray Spectroscopy of an Extreme outbursting Young Stellar Object”, Britt, C. T., Maccarone, T. J., Green, J. et al. 2015, XMM ID#078322

“Dynamical Mass Measurements of Eclipsing Candidate Black Hole Binaries Discovered in Quiescence” Britt et al. 2015, NOAO, prop 272

“Spectroscopy of a New Candidate Black Hole Discovered in Quiescence”, Britt, C. T., Maccarone, T. J., Hynes, R. I. et al. 2014 NOAO, prop 378B

“NIR Spectrum of new Candidate FU Orionis Star”, Britt, C. T., Maccarone, T. J., Green, J. 2014 NOAO, Gemini prop PW-2013B-006

“Photometric Calibration and Bright Variables in the Chandra Galactic Bulge Survey” Britt et al. 2012 NOAO, prop 424A

Astronomers’ Telegrams:

“Swift J1910.2-0546: Optical Variability”, Britt, C.T., Johnson, C.C., Hynes, R.I., ATEL 4195, 1B

Coauthorships

Papers:

“Sco X-1 revisited with Kepler, MAXI and HERMES: outflows, time-lags and echoes unveiled”, Scaringi et al. 2015, MNRAS, 451, 3857

“Gemini spectroscopy of Galactic Bulge Sources: a population of hidden accreting binaries revealed?” Wu et al. 2015, MNRAS, 448, 1900

“CXOGBS J173620.2-293338: A Candidate Symbiotic X-ray Binary Associated with a Bulge Carbon Star”, Hynes, R. I., Torres, M. A. P., Heinke, C. O. et al. 2014, ApJ, 780, 11

“HD 314884: a slowly pulsating B star in a close binary”, Johnson, C. B.; Hynes, R. I., Maccarone, T., et al. 2014, MNRAS, 444, 1584

- “Identification of 23 Accreting Binaries in the Galactic Bulge Survey”, Torres, M. A. P., Jonker, P. G., Britt, C. T., et al. 2014, MNRAS, 440, 365
- “Near-infrared counterparts to the Galactic Bulge Survey X-ray source population”, Greiss, S., Steeghs, D., Jonker, P. G., et al. 2014, MNRAS, 438, 2839
- “The Galactic Bulge Survey: Completion of the X-Ray Survey Observations”, Jonker, P. G., Torres, M. A. P., Hynes, R. I. et al. 2014, ApJS, 210, 18
- “CXOGBSJ174444.7-260330: a new long orbital period cataclysmic variable in a low state”, Ratti, E. M., van Grunsven, T. F. J., Jonker, P. G., et al. 2013, MNRAS, 428, 3543
- “The Orbital Period of Scorpius X-1”, Hynes, R. I. & Britt, C. T., 2012, ApJ, 755, 66H
- “Identification of Galactic Bulge Survey X-ray Sources with Tycho-2 Stars” Hynes, R. I., Wright, N. J., Maccarone, T. J. et al. 2012, ApJ, 761, 162
- “Radio sources in the Chandra Galactic Bulge Survey”, Maccarone et al. 2012, MNRAS, 426, 3057M
- “The Galactic Bulge Survey: Outline and X-ray Observations”, Jonker et al. 2011, ApJS, 194, 18J