

## **Christopher T. Britt**

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### **Education**

Bachelor of Science degree (2008) from Louisiana State University

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

Masters (2011) in Physics, Louisiana State University

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

Post-doctoral Fellow in Department of Physics at Texas Tech University, 2013-2016

Post-doctoral Fellow in Department of Physics & Astronomy at Michigan State University, 2016-present

### **Invited Talks**

University of Michigan – Astronomy Seminar, December 2016

Michigan State University — Astronomy seminar, October 2016

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

NSF panelist in June, 2016

LSST Milky Way 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, October 2015

LSST Observing Strategies white paper contributor, Milky Way Plane section.

### **Observing Experience**

Lead Observer present for:

- SOAR Observatory, MSU membership time  
Instrument: Goodman Spectrograph. 7 nights, 2016-present
- 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
- CTIO, NOAO Proposal ID #2011-A0432  
Telescope: YALO 1m at CTIO. Instrument: Y4KCam. 7 nights, June 2011
- Las Campanas Observatory  
Telescope: Henrietta Swope Telescope at LCO. Instrument: SITE#3. 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 in Lubbock, TX, 2015-2016.

Assistant Moderator and Astronomy panelist of reddit.com/r/AskScience, an online community with over 14.7 million subscribers. 2013-present

Presented talk to Ionia High School astronomy students, 02-2017

Judged astronomy presentations for Ionia High School astronomy class, 05-2017

Presented an introduction to the solar system at Sycamore Elementary School in Holt, MI, 02-2017

Presented an introduction to the solar system at Wright Elementary School in Lubbock, TX, 02-2016

Judged solar system presentations at Wright Elementary School in Lubbock, TX, 02-2016

Presenter at “Astronomy on Tap” in Lansing, MI, 10-2016 & 11-2017

Public observing on small telescopes for MSU observatory, 2016-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**

Taught 154 person lecture course ISP205 — Visions of the Universe, an introduction to astronomy for non-majors, at Michigan State University in Fall, 2017.

Taught 180 person lecture course Astronomy 1400 – Solar System Astronomy at Texas Tech University in Fall, 2014.

Center for Astronomy Education Workshop attended at 219<sup>th</sup> AAS meeting in Austin, TX

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

Mentored undergraduates in research projects at Louisiana State University, 2011-2013, with some results presented at AAS meetings

### **Awards and Scholarships**

Louisiana Board of Regents Fellowship

Louisiana Space Consortium (LaSPACE) Graduate Student Research Assistance

## **First Authorships**

### *Papers:*

- “Orbital Dynamics of Candidate Transitional Millisecond Pulsar 3FGL J1544.6-1125: An unusually face-on system” Britt, C.T. et al. ApJ, in press, arXiv: 170906087
- “Discovery of a long-lived, high-amplitude dusty infrared transient” Britt et al, 2016, MNRAS, 460, 2822
- “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
- “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.

### *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 50<sup>th</sup> 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:*

- “Exploring New Dynamically Selected Black Hole Candidates Found in Quiescence” Britt, C. T., Maccarone, T. J., Jonker, P. G., et al. E-VLA, NRAO ID: 17B-227
- “Spectral Evolution of a Black Hole X-ray Transient” Britt, C.T., Maccarone, T. J., Gemini ID: GS-2017A-Q-84, GS-2016A-Q-87 , GS-2016B-Q-Q35, ToO untriggered
- “X-ray Spectroscopy of an Extreme outbursting Young Stellar Object”, Britt, C. T., Maccarone, T. J., Green, J., et al. XMM ID#078322, 2015
- “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:*

- “Brackett-Gamma emission in MAXI J1535-571”, Britt, C.T., Bahramian, A., Strader, J., ATEL #10816, 1B
- “Swift J1910.2-0546: Optical Variability”, Britt, C.T., Johnson, C.C., Hynes, R.I., ATEL #4195, 1B
- “ASASSN-16do confirmed as high inclination, low mass ratio CV”, Britt, C.T., Maccarone, T., Strader, J. Chomiuk, L. ATEL #8987, 1B

**Coauthorships***Papers:*

- “Science-Driven Optimization of the LSST Observing Strategy”, LSST Science Collaboration, et al. arXiv: 170804058
- “Spectroscopic classification of X-ray sources in the Galactic Bulge Survey”, Wevers, T., et al, 2017, MNRAS, 470, 4512
- “Candidate H $\alpha$  emission and absorption line sources in the Galactic Bulge Survey”, Wevers, T., et al. 2017, MNRAS, 466, 163
- “CXOGBS J174954.5-294335: a new deeply eclipsing intermediate polar”, Johnson, C.B., et al. 2017, MNRAS, 466, 129
- “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”, Robert I. Hynes & Christopher T. Britt, 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