TERESA PANURACH

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EDUCATION

Michigan State University (MSU) East Lansing, MI, USA PhD Student in Astronomy and Astrophysics Advisors: J. Strader and L. Chomiuk The City University of New York (CUNY) at Hunter College New York, NY, USA B.A in Physics

AWARDS AND GRANTS

NSF Graduate Research Fellowship (\$138,000)	2020
AstroCom NYC Fellowship (Full Tuition Coverage and Summer Research Stipend)	2016 - 2018
American Astronomical Society (AAS) FAMOUS Travel Grant (\$500)	2018
AstroCom NYC Senior Scholarship (Graduate School Application Fees) (\$700)	2017

REFEREED PAPERS

- 3. GS2000+25: The Least Luminous Black Hole X-ray Binary
- J. Rodriguez, R. Urquhart, R. Plotkin, **T. Panurach**, L. Chomiuk, J. Strader, J. Miller-Jones, E. Gallo,
- G. Sivakoff. 2020, Astrophysical Journal, 889, 58R
- 2. Constraints On Blue Straggler Formation Mechanisms in Galactic Globular Clusters from Proper Motion Velocity Distributions.
- N. W. C. Leigh, **T. Panurach**, M. Simunovic, A. M. Geller, D. Zurek, M. M. Shara, A. Sills, C. Knigge, N. Gosnell, R. Mathieu, T. H. Puzia, J. Ventura, Q. Minor. 2019, Monthly Notices of the Royal Astronomical Society, 482, 231
- 1. When Do Clusters Become Multiple Star Systems?: II. Towards a Half-Life Formalism with Four Bodies.
- T. Ibragimov, N. W. C. Leigh, T. Ryu, **T. Panurach**, R. Perna. 2018, Monthly Notices of the Royal Astronomical Society, 477, 4213

SELECTED RESEARCH EXPERIENCES

Graduate Research Assistant:

Dept. of Physics and Astronomy, MSU, East Lansing, MI

Advisors: J. Strader and L. Chomiuk

2018 - Present

• Radio and X-ray observations of low-mass X-ray binaries in globular clusters

Undergraduate Research Assistant:

Dept. of Astrophysics, American Museum of Natural History (AMNH), New York, NY

Advisor: N. W. C. Leigh 2017 - 2018

- Constrained the formation of blue stragglers in globular clusters observed by HST
- Created numerical simulations of binary-binary star systems

TEACHING

Teaching Assistant AST 208: Planets and Telescopes (31 students, MSU)	Spring 2020
Teaching Assistant ISP 205L: Visions of the Universe (2 sections, 156 students, MSU)	Spring 2019
Teaching Assistant ISP 205L: Visions of the Universe (2 sections, 178 students, MSU)	Fall 2018

STUDENTS ADVISED

Research

Jennifer Rodriguez (MSU)

2019 - Present

- Reduced and analyzed radio observations of black hole X-ray binary, GS2000+25
- Results published with student as first-author

Jerry Ortiz (CUNY at College of Staten Island)

Summer 2019

Calculated the velocity dispersion of nucleated galaxies in the Virgo Cluster using optical spectroscopy

PRESENTATIONS

 \star signifies presentations given virtually due to COVID-19

Talks

Vanderbilt University Astronomy Seminar \star

November 2020

"Jet-Accretion Coupling in Luminous Accreting Neutron Stars in Galactic Globular Clusters"

Chandra Frontiers in Time-Domain Science Lightning Talk \star

October 2020

"Jet-Accretion Coupling in Luminous Accreting Neutron Stars in Galactic Globular Clusters"

MSU Physics Graduate Organization Seminar *

September 2020

"Jet-Accretion Coupling in Luminous Accreting Neutron Stars in Galactic Globular Clusters"

AAS High Energy Astronomy Division (HEAD) Talk *

September 2020

"Jet-Accretion Coupling in Luminous Accreting Neutron Stars in Galactic Globular Clusters"

AMNH REU Symposium

August 2017

"Blue Stragglers and Other Stars of Mass Consumption in Globular Clusters"

Hunter College Undergraduate Research Conference

April 2017

"Blue Stragglers and Other Stars of Mass Consumption in Globular Clusters"

Society for Physics and Astronomy Research Conference

October 2016

"Understanding the IGM Through the Use of a Lensed Quasar"

AMNH REU Symposium

August 2016

"Understanding the IGM Through the Use of a Lensed Quasar"

Posters

235th AAS Meeting

January 2020

"Jet-Accretion Coupling in Luminous Accreting Neutron Stars in Galactic Globular Clusters"

231st AAS Meeting

January 2018

"Blue Stragglers and Other Stars of Mass Consumption in Globular Clusters"

Columbia University Astrofest

September 2017

"Blue Stragglers and Other Stars of Mass Consumption in Globular Clusters"

229th AAS Meeting	January 2017
"Understanding the IGM Through the Use of a Lensed Quasar"	
Princeton University Conference for Undergraduate Women in Physics (CUWiP)	January 2017
"Understanding the IGM Through the Use of a Lensed Quasar"	
Workshops	
Maximizing Your Mentoring Relationships Workshop (MSU, AMNH, and NRAO)	June 2017 - 2020
Applying to REU and Internships Workshop (CUWiP)	January 2019
Outreach	
Intrepid Sea, Air and Space Museum's GOALS for Girls Presenter \star	July 2020
MSU's Science Festival Presenter	April 2019
Astronomy on Tap: Lansing	September 2018
Astronomy on Tap: New York City	June 2018

ACADEMIC SERVICE

Physics and Astronomy Department Colloquium Host (MSU)	2020 - Present
X-ray Binary Journal Club Host (MSU)	2020 - Present
Stellar Mentorship Program Mentor (MSU)	2020
Graduate Student Search Committee Representative for Astronomy Faculty Position	(MSU) 2020
National Radio Consortium Chapter Leader (MSU)	2019 - Present
Graduate Student Recruitment Organizer (MSU)	2019
CUWiP Local Organizing Committee (MSU)	2018 - 2019

SKILLS

Programming: Python (astropy, numpy, scipy, scikit-learn, matplotlib)

Major Astronomical Packages: AstroPy, CASA Languages: English (native), Thai (fluent)