TERESA PANURACH (SHE/HER)

Center for Materials Research, Norfolk State University, 700 Park Ave., Norfolk, Virginia 23504
tpanurach.github.io ◇ tpanurach@nsu.edu

RESEARCH INTERESTS

surveys, globular clusters, low–mass X-ray binaries, radio astronomy, high energy phenomena

APPOINTMENTS

Norfolk State University, Norfolk, VA
Executive Director, NoVEL Consortium Program — 2023 - Present

Michigan State State University (MSU), East Lansing, MI
Dept. of Physics and Astronomy
Graduate Resarch Assistant/NSF Graduate Research Fellow — 2018 - 2023

American Museum of Natural History, New York, NY
Dept. of Astrophysics
Undergraduate Resarch Assistant/AstroCom NYC Research Fellow — 2016 - 2018

EDUCATION

MSU, East Lansing, MI
Ph.D in Astronomy and Astrophysics — 2023

MSU, East Lansing, MI
M.S in Astronomy and Astrophysics — 2021

The City University of New York (CUNY) at Hunter College, New York, NY
B.A in Physics — 2018

AWARDS, GRANTS, AND FELLOWSHIPS

#iteachmsu Educator Award — 2021
NSF Graduate Research Fellowship, $138,000 — 2020 - 2023
AstroCom NYC Fellowship, Full Tuition Coverage and Summer Research Stipend — 2016 - 2018
American Astronomical Society FAMOUS Travel Grant (229th Meeting), $500 — 2018
AstroCom NYC Senior Scholarship, $700 — 2017

TELESCOPE PROPOSALS AND OBSERVING EXPERIENCE

Tracking the Enigmatic Globular Cluster Ultracompact X-ray Binary X1850-087, 3 hours, Joint with Swift (6ks), **PI: T. Panurach** — VLA 2022A
SOAR/GHTS Telescope (4.1m), Cerro Pachon, Chile — $\sim$ 160 hours
Irenee du Pont Telescope (2.5m), Las Campanas Observatory, Chile — 15 hours

TEACHING

Teaching Assistant AST 208: Planets and Telescopes (31 students, MSU) — 2020

- Assistant instructor for introductory astronomy lab and lecture for astronomy majors

Teaching Assistant ISP 205L: Visions of the Universe (8 sections, 300 students, MSU) — 2018 - 2019

- Instructor of record for introductory astronomy lab for non-majors

STUDENT SUPERVISION

Research

Jennifer Rodriguez (MSU, Charles Drew Scholar–grad school at Ohio State U.) 2019 - 2020

- Reduced and analyzed *VLA* observations of black hole X-ray binary, GS2000+25; resulted in student's first-author publication

Jerry Ortiz (CUNY at College of Staten Island, AstroCom NYC Scholar) Summer 2019

- Calculated the velocity dispersion of nucleated galaxies in the Virgo Cluster using optical spectroscopy from *Keck*

Career

Miranda Pikus (MSU, Charles Drew Scholar)	2022 - 2023
Payton Walton (MSU, Charles Drew Scholar)	2022 - 2023
Atticus Chong (MSU, Charles Drew Scholar)	2021 - 2023
Ryan Copeland (MSU, Charles Drew Scholar)	2021 - 2023
Lauren McDermott (MSU, Charles Drew Scholar–grad school at Washington State U.)	2021 - 2022
Elias Taira (MSU, Charles Drew Scholar)	2021 - 2023
Anita Agasaveeran (MSU, Charles Drew Scholar)	2021 - 2023
Ashley Stone (MSU)	2021 - 2023
Wasundara Athukoralalage (MSU, SURF Fellow at Caltech)	2020 - 2023

CONFERENCE AND SEMINAR TALKS

241st American Astronomical Society Dissertation Talk (Seattle, WA)	Jan 2023
National Society of Black Physicists Contributed Talk (Charlottesville, VA)	Nov 2022
Liverpool John Moores University Journal Club Speaker (Virtual)	Sept 2022
MSU Astronomy Seminar (Virtual)	April 2022
Northwestern University CIERA Science Happy Hour (Virtual)	April 2022
American Museum of Natural History Astronomy Colloquium (Virtual)	Jan 2022
Compact Objects 9 (Virtual)	May 2021
Vanderbilt University Astronomy Seminar (Virtual)	Nov 2020
Chandra Frontiers in Time-Domain Science Lightning Talk (Virtual)	Oct 2020
MSU Physics Graduate Organization Seminar (Virtual)	Sept 2020
AAS: High Energy Astronomy Division Frontier Seminar (Virtual)	Sept 2020
REU Symposium (New York, NY)	Aug 2017
CUNY at Hunter College Undergraduate Research Conference (New York, NY)	April 2017
Society for Physics and Astronomy Research Conference (New York, NY)	Oct 2016
REU Symposium (New York, NY)	Aug 2016

OUTREACH AND PUBLIC TALKS

Intrepid Sea, Air and Space Museum's GOALS for Girls Presenter (Virtual)	July 2021
MSU Twitter Manager (@MSU_astro)	2021 - 2023
One Million Women in STEM Featured Scientist	Jan 2021
Intrepid Sea, Air and Space Museum's GOALS for Girls Presenter (Virtual)	July 2020
MSU's Science Festival Presenter (East Lansing, MI)	April 2019
Astronomy on Tap: Lansing Presenter (Lansing, MI)	Sept 2018
Astronomy on Tap: New York City Presenter (Brooklyn, NY)	June 2018

CONFERENCE POSTERS

235th American Astronomical Society Meeting (Honolulu, HI)	Jan 2020
231st American Astronomical Society Meeting (Washington D.C)	Jan 2018
Columbia University Astrofest (New York, NY)	Sept 2017
229th American Astronomical Society Meeting (Grapevine, TX)	Jan 2017
Princeton University Conference for Undergraduate Women in Physics (CUWiP)	Jan 2017

ACADEMIC SERVICE

MSU Astronomy Group Seminar Committee	2022 - 2023
MSU Astronomy Group Website Committee	2021 - 2023
P-A Research Experiences with Drew Scholars Conference Organizer	2021 - 2022
Physics and Astronomy Department Colloquium Host	2020 - 2021
Co–creator and organizer of Astro Coffee Journal Club	2020 - 2021
X-ray Binary Journal Club Host	2020 - 2021
Graduate Student Search Committee Representative for Astronomy Faculty Position	2020
Graduate Student Recruitment Organizer	2019
CUWiP Local Organizing Committee	2018 - 2019

DIVERSITY, EQUITY, AND INCLUSION

Stellar Mentorship Program Mentor (East Lansing, MI)	2020 - 2023
Maximizing Your Mentoring Relationships Workshop (East Lansing, MI)	June 2020
P-A Research Experiences with Drew Scholars Director (East Lansing, MI)	2020 - 2023
National Radio Consortium Chapter Leader (East Lansing, MI)	2019 - 2023
Maximizing Your Mentoring Relationships Workshop (Charlottesville, VA)	June 2019
Maximizing Your Mentoring Relationships Workshop (New York, NY)	June 2019
Maximizing Your Mentoring Relationships Workshop (East Lansing, MI)	June 2019
Applying to REU and Internships Workshop (MSU CUWiP)	Jan 2019
Maximizing Your Mentoring Relationships Workshop (New York, NY)	June 2018
Maximizing Your Mentoring Relationships Workshop (New York, NY)	June 2017

SOFTWARE KNOWLEDGE AND SKILLS

Technologies: Python (pandas, matplotlib, numpy, scipy, scikit-learn, astropy), Jupyter-Notebook/Lab, Anaconda, UNIX/Linux, Git, statistics, statistical modeling, regression analysis
Major Astronomical Packages: AstroPy, CASA, IRAF
Languages: English (native), Thai (fluent)

INTERNATIONAL COLLABORATIONS AND PROFESSIONAL SOCIETIES

The Legacy Survey of Space & Time - Transient and Variable Stars Working Group	2023 - Present
National Society of Black Physicists	2022 - Present
Milky Way ATCA and VLA Exploration of Radio-sources in Clusters Survey	2018 - Present
American Astronomical Society	2017 - Present

PUBLICATIONS

Refereed Publications:

7. *Catching a nova X-ray/UV ash in the visible? Early spectroscopy of the extremely slow Nova Velorum 2022 (Gaia22alz)*
E. Aydi et al. (including **T. Panurach**), 2023 (Submitted to MNRAS)

6. *Tracking the Enigmatic Globular Cluster Ultracompact X-ray Binary X1850087: Extreme Radio Variability in the Hard State*
T. Panurach, R. Urquhart, J. Strader, L. Chomiuk, A. Bahramian, J. Miller-Jones, C.O. Heinke, T.J. Maccarone, G.R. Sivakoff. 2023, Astrophysical Journal, 946, 88P

5. *Multi-wavelength Observations of a New Redback Milisecond Pulsar Candidate 4FGL J1910.75320*
K. Au, J. Strader, S. J. Swihart, L. C. C. Lin, A. K. H. Kong, J. Takata, C. Hui, **T. Panurach**, I. Molina, E. Aydi, K. Sokolovsky, and K. Li. 2022, Astrophysical Journal, 943, 103A

4. *The MAVERIC Survey: Variable Jet–Accretion Coupling in Luminous Accreting Neutron Stars in Galactic Globular Clusters*
T. Panurach, J. Strader, A. Bahramian, L. Chomiuk, J. Miller-Jones, C.O. Heinke, T.J. Maccarone, L. Shishkovsky, G.R. Sivakoff, E. Tremou, V. Tudor, and R. Urquhart. 2021, Astrophysical Journal, 923, 88

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.R. 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

Unrefereed Publications:
SOAR spectroscopic confirmation of Gaia22bhs as a highly reddened Galactic classical nova
A. Kawash, E. Aydi, J. Strader, L. Chomiuk, K. Sokolovsky, **T. Panurach.**, I. Molina. 2022, The Astronomers Telegram, No. 15318

Other Publications:
7. *The Astronomy Group Welcomes Two Graduate Students* Dec 2022
T. Panurach. MSU Astronomy Group Newsletter.

6. *Unforecasted Turbulence: Teresa Panurach* May 2022
T. Panurach. MSU College of Natural Science: NatSci Profiles (Reposted from Astrobites)

5. *Celebrating this Year's Milestones* May 2022
T. Panurach. MSU Astronomy Group Newsletter.

4. *Unforecasted Turbulence: Teresa Panurach* May 2022
T. Panurach. Astrobites.

3. *The Astronomy Group Welcomes Three Graduate Students* Jan 2022
T. Panurach. MSU Astronomy Group Newsletter.

2. *Undergraduate Jessie Miller Wins Thomas Osgood Outstanding Senior Award* June 2021

T. Panurach. MSU Astronomy Group Newsletter.

1. *Four Astronomy Undergraduates Receive Lawrence W. Hantel Endowed Fellowship* March 2021
T. Panurach. MSU Astronomy Group Newsletter.