

Rebecca Kyer

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Education

MICHIGAN STATE UNIVERSITY

Ph.D. Candidate, thesis advisor: Jay Strader

M.S., Astrophysics and Astronomy

East Lansing, MI

Nov 2024 – present

Aug 2022 – Nov 2024

UNIVERSITY OF WASHINGTON

B.S., Physics and Astronomy

Astronomy Departmental Honors

Seattle, WA

Jun 2021

Publications

Refereed

5. “Investigating four new candidate redback pulsars discovered in the image plane.” Petrou, F., Hurley-Walker, N., McSweeney, S. et al. (incl. **Kyer, R.**), accepted to PASA, arXiv:2509.25943
4. “Multiwavelength evidence for two new candidate transitional millisecond pulsars in the subluminal disk state: 4FGL J0639.1–8009 and 4FGL J1824.2+1231.” **Kyer, R.**, Roy, S., Strader, J., et al. 2025, ApJ, 983, 112
3. “A survey for radio emission from white dwarfs in the VLA Sky Survey.” Pelisoli, I., Chomiuk, L., Strader, J., et al. (incl. **Kyer, R.**) 2024, MNRAS, 531, 1805
2. “Monitoring the X-ray variability of bright X-ray sources in M33.” **Kyer, R.**, Albrecht, S., Williams, B. F., et al. 2024, ApJ, 961, 168
1. “Revisiting the classics: on the evolutionary origin of the ‘Fe II’ and ‘He/N’ spectral classes of novae.” Aydi, E., Chomiuk, L., Strader, J. et al. (incl. **Kyer, R.**) 2024, MNRAS, 527, 9303

Non-refereed

“The Advanced X-ray Imaging Satellite Community Science Book.” Koss, M., Aftab, N., Allen, S. et al (incl. **Kyer, R.**) 2025, arXiv:2511.00253

“Unlocking the Rapid X-ray Variability of Transitional Millisecond Pulsars.” **Kyer, R.**, Ng, M., Coti Zelati, F. et al.

“Catching Spiders with AXIS.” Coti Zelati, F., An, H., Baglio, M. C. et al. (incl. **Kyer, R.**)

Transient Name Server Classification Report No. 2024-2571, classification of SN 2024pxg as a SN II. Bostroem, K. A., **Kyer, R.**, Strader, J. et al. 2024

Various classification reports in The Astronomer’s Telegram (No. 16583, 16440, 16294)

Telescope Time

Gemini-North Fast Turnaround ID GN-2025B-FT-202, 0.38 hr, PI

Aug 2025

Green Bank Telescope 2025B Legacy ID QS402, 15 hr awarded, Co-I/Observer

2025

XMM-Newton AO-24 ID 096163, 57 ksec awarded, Scientific PI

2025

<i>Swift</i> Target of Opportunity ID 21032, 8.5 ksec, PI	Aug 2024
<i>Swift</i> Target of Opportunity ID 20572, 3.8 ksec, PI	June 2024
170+ hours remote observing with the 4.1-m SOAR telescope	2023–present

Research Presentations

Compact Objects in Michigan and Ontario talk (Flint, MI)	Sept 2025
Vasto Accretion Meeting talk (Vasto, Italy)	June 2025
AXIS Community Science Meeting talk (Annapolis, MD)	May 2025
Int'l Symposium of Science with the SOAR Telescope talk (East Lansing, MI)	May 2025
ESAC XMM-Newton Science Workshop poster (Madrid, Spain)	June 2024
Compact Objects in Michigan and Ontario talk (Dearborn, MI)	May 2024

Research Advising Experience

Andrew Harms (MSU), co-advised with Ryan Urquhart	May 2025–present
Subhroja Roy (MSU; now U. Notre Dame Nuclear Astrophysics)	May 2024–May 2025

Outreach Activities

Letters to a Pre-Scientist Penpal	2 penpals
Astronomy on Tap Speaker (Lansing, MI)	Nov 2023, Apr 2025
Campus Observatory Public Night Volunteer (East Lansing, MI)	Aug 2022–present

Professional Service

NASA AXIS Probe CO/SNR Working Group Member	Dec 2024–present
P-A Research Experiences for Drew Scholars Junior Director	Apr 2024–present
Faculty Search Committee Graduate Student Representative	Feb 2024
Stellar Mentorship Program Coordinator and Peer Mentor	Aug 2023–present
Astro Coffee Journal Club Organizer	Jun 2023–present

Teaching Experience

Teaching Assistant AST 208: Planets and Telescopes (30 students; MSU)	Jan–May 2024
Teaching Assistant ISP 205L: Visions of the Universe (400 students; MSU)	Aug 2022–Dec 2023
Instructor GEN ST 199: Astronomy First-year Interest Group (30 students; UW)	Sep–Dec 2020

Awards and Honors

Honorable Mention, NSF Graduate Research Fellowship	Apr 2024
Graduate Teaching Assistant Award, MSU Physics and Astronomy	Apr 2024, Apr 2023
Harlo Mervyn Mork Excellence in Teaching Award, MSU College of Natural Science	Nov 2023