

Rebecca Kyer

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Education

MICHIGAN STATE UNIVERSITY Ph.D. Candidate, Astrophysics and Astronomy M.S., Astrophysics and Astronomy	East Lansing, MI <i>Aug 2022 – present</i> <i>Nov 2024</i>
UNIVERSITY OF WASHINGTON B.S., Physics and Astronomy <i>Astronomy Departmental Honors</i>	Seattle, WA <i>Jun 2021</i>

Publications

Refereed.....

4. "Multiwavelength Evidence for Two New Candidate Transitional Millisecond Pulsars in the Sub-luminous 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, Benjamin 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.....

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

XMM-Newton AO-24 proposal ID 096163, 57 ksec, Scientific PI	2025
Swift Target of Opportunity ID 21032, 8.5 ksec, PI	Aug 2024
Swift Target of Opportunity ID 20572, 3.8 ksec, PI	June 2024
120+ hours remote observing with the 4.1-m SOAR telescope (Chile)	2023–present

Research Presentations

ESAC XMM-Newton Science Workshop Poster (Madrid, Spain)	June 2024
Compact Objects in Michigan and Ontario Contributed Talk (Dearborn, MI)	May 2024

Research Advising Experience

Subhroja Roy (MSU), Bachelor's Senior Thesis

May 2024–present

Technical Skills

Optical photometry and single slit spectroscopy acquisition, reduction and analysis; X-ray reduction and analysis; pulsar timing; certified Green Bank Telescope remote observer; working with large multiwavelength archival and survey datasets.

Software: Python, IRAF, SAOImage DS9, CIAO, xspec, pimms

Teaching Experience

Teaching Assistant AST 208: Planets and Telescopes (1 section; 30 students; MSU) Jan–May 2024

Teaching Assistant ISP 205L: Visions of the Universe (6 sections; 400 students; MSU) Aug 2022–Dec 2023

Instructor GEN ST 199: Astronomy First-year Interest Group (1 section; 30 students; UW) Sep–Dec 2020

Outreach Activities

Letters to a Pre-Scientist Penpal Oct 2024–present

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 CO/SNR Working Group Member Dec 2024–present

Astronomy Seminar Host Oct 2024

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

Awards and Honors

Honorable Mention, NSF Graduate Research Fellowship Apr 2024

Graduate Teaching Assistant Award, MSU Department of Physics and Astronomy Apr 2024, Apr 2023

Harlo Mervyn Mork Excellence in Teaching Award, MSU College of Natural Science Nov 2023