Michael Rizzo Smith

michael.smith.4@vanderbilt.edu | michael.josmith21@gmail.com | mjosmith.github.io

Education

Vanderbilt University — Nashville, TN
Ph.D Astrophysics — *Aug 2023 - Exp. 2028*
Advisor: Kelly Holley-Bocklemann

Stony Brook University — Stony Brook, NY
Bachelor of Science, Physics and Astronomy & Planetary Science — *Aug 2017 - May 2021*
Magna Cum Laude with Honors in Physics

Awards and Honors

Vanderbilt Graduate School Travel Grant	July 2024
McMinn Research Award	May 2024
Robert T. Lagemann Award	Apr 2024
Stony Brook Campus Scholarship	Aug 2017 - May 2021

Professional Work and Teaching

Member, LISA, Disc-IMRI Astrophysics Working Group — Dec 2023 - present
DISCO Code-Captain, contributes simulated data sets for analysis

Member, Establishing Multimessenger astronomy Inclusive Training (EMIT) — Sep 2023 - present

Teaching Assistant, ASTR 1010L: Intro to Astronomy Lab — Spring 2024

Teaching Assistant, ASTR 1010L: Intro to Astronomy Lab — Fall 2023

Data Analyst, The Ohio State University — Jun 2021 - July 2023
Full-Time Research Assistant and Data Analyst for the All-Sky Automated Survey for Supernovae

Presentations

Talk, The 15th International LISA Symposium — July 2024
Presenting on behalf of the Disc-IMRI Code Comparison LISA Astrophysics Working Group

Talk, Vanderbilt's Astrophysics Journal Research Club — Feb 2024
Astrophysical Disk Modelling With Hydrodynamic Simulations

Publications

Accepted or submitted to peer-reviewed scientific journals

(1 first-author, 3 co-author, 60 citations)

1. J. M. M. Neustadt, C. S. Kochanek, and **Rizzo Smith, M.** *Constraints on pre-SN outbursts from the progenitor of SN 2023ixf using the large binocular telescope*. In: MNRAS 527.3 (Jan. 2024), pp. 5366–5373. arXiv: 2306.06162 [astro-ph.HE]

2. Matthew Kenworthy, [20 authors], and **Rizzo Smith, Michael**. *A planetary collision afterglow and transit of the resultant debris cloud*. In: Nature 622.7982 (Oct. 2023), pp. 251–254. arXiv: 2310.08360 [astro-ph.EP]

3. **Rizzo Smith, M.**, C. S. Kochanek, and J. M. M. Neustadt. *The late time optical evolution of twelve core-collapse supernovae: detection of normal stellar winds*. In: MNRAS 523.1 (July 2023), pp. 1474–1495. arXiv: 2212.09763 [astro-ph.HE]

4. A. Kawash, [11 authors], **Rizzo Smith, M.**, T. W. -S. Holoien, J. L. Prieto, and T. A. Thompson. *The Galactic Nova Rate: Estimates from the ASAS-SN and Gaia Surveys*. In: The Astrophysical Journal 937.2, 64 (Oct. 2022), p. 64. arXiv: 2206.14132

(1 first-author in prep)

1. **Rizzo Smith, M.** and C. S. Kochanek. *A Search For Emission From Old Core-Collapse Supernovae*. In: Prep. (2024)

Non-Referred Publications

1. M. Rizzo Smith and ASASSN-Team. *An Update on ASASSN-21qj: A Rapidly Fading, Sun-Like Star; Back With a Vengeance*. In: The Astronomer's Telegram 15531 (July 2022), p. 1

2. M. Rizzo Smith and ASASSN-Team. *ASASSN-22el: A Deep Eclipse Event*. In: The Astronomer's Telegram 15308 (Apr. 2022), p. 1

3. M. Rizzo Smith and ASASSN-Team. *ASASSN-21sa: A Deep Dimming Event*. In: The Astronomer's Telegram 14937 (Sept. 2021), p. 1

4. M. Rizzo Smith and ASASSN-Team. *ASASSN-21qj: A Rapidly Fading, Sun-Like Star*. In: The Astronomer's Telegram 14879 (Aug. 2021), p. 1

5. M. Rizzo Smith and ASASSN-Team. *ASASSN-21nn: An Unusual Dimming Event in a Red Giant Star*. In: The Astronomer's Telegram 14803 (July 2021), p. 1

6. M. Rizzo Smith and ASASSN-Team. *ASASSN-21ml: Discovery of an Extreme (Delta g $>$ 10 mag) L-Dwarf Flare*. In: The Astronomer's Telegram 14778 (July 2021), p. 1