

Yael Alush – CV

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EDUCATION	PhD in Physics , The Hebrew University of Jerusalem Thesis: <i>Dynamics and Transients in Galactic Centers: Laboratories for General Relativity</i> Advisor: Nicholas C. Stone MSc in Physics , The Hebrew University of Jerusalem Thesis: <i>Black Holes Testing General Relativity, Revisited</i> Advisor: Nicholas C. Stone BSc in Applied Mathematics , Bar-Ilan University Studied simultaneously with high school: “The Youth Gifted in Mathematics program”	2021– 2019–2021 2011–2014
TEACHING	Teaching Assistant , The Hebrew University of Jerusalem Physics 77101: Mechanics and Special relativity Physics 77401: Analytical Electrodynamics Teaching Assistant , The Hebrew University of Jerusalem Physics 77101: Second-year BSc lab course	2024–2025 2019–2024
PROFESSIONAL EXPERIENCE	Full Stack Developer , Intelligence Corps, IDF Developed microservices and web applications using Node.js, Angular, MSSQL, and ElasticSearch. Automation Developer , Intelligence Corps, IDF Developed .NET automation frameworks using Selenium. Designed CI plans and testing infrastructure using Bamboo.	2016–2019 2014–2016
PROFESSIONAL SERVICE	ULTRASAT associate member	2025–
HONORS & AWARDS	<ul style="list-style-type: none">Azrieli Fellowship <i>Awarded annually to 10 early PhD students in exact sciences across Israel.</i>Dean list	2024– 2021
PUBLICATIONS	a) Published: Alush, Y., & Stone, N. C. (2025). “Late-Time Evolution of Magnetized Disks in Tidal Disruption Events”. ApJ 993 14. Alush, Y., & Stone, N. C. (2022). “Revisiting Stellar Orbits and the Sgr A* Quadrupole Moment”. Physical Review D, 106(12), 123023.	

b) Submitted:

Alush, Y., Stone, N. C., van Velzen, S. “How Flat is a Plateau? Evolution of Late-Time TDE Disks”. [arXiv:2510.24696](https://arxiv.org/abs/2510.24696).

c) Near Submission:

Alush, Y., Stone, N. C., Hughes, S. A. “EMRIs in Kerr Spacetime: The Role of Inclination Diffusion”.

TALKS &
POSTERS

- KU Astro Seminar, online, Oct. 2025.
- Loss Cones in Como, Como, Sep. 2025.
- X-ray Quasi-Periodic Eruptions and Repeating Nuclear Transients, Madrid, Jun. 2025.
- UW-Madison science seminar, Madison, Mar. 2025.
- Leiden Observatory group meeting, online, Feb. 2024.
- Bar Ilan astrophysics seminar, Ramat Gan, Nov. 2024.
- Tidal Disruption Events and Nuclear Transients: Entering the Data-Rich Era, Heraklion, Sep. 2024.
- AsCoS: Astrophysics & Cosmology Student Conference, Tel Aviv, Aug. 2024.
- GRAVITY, Fundamental Physics at the Galactic Centre Workshop, Porto, Dec. 2023.
- CIERA seminar, The Northwestern University, Chicago, Aug. 2023.
- MODEST-23, Chicago (poster), Aug. 2023.
- Israel Physical Society (IPS) conference, Tel Aviv, Apr. 2023.
- Ilan Ramon International Space Conference, Tel Aviv (poster), Feb. 2023.
- Unsolved Astrophysics Problems, Jerusalem, (poster), Dec. 2022.

VOLUNTARY &
OUTREACH

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| • Volunteered as an academic advisor in the Ramon SpaceLab program
<i>Middle school students design experiments that are launched into space and conducted by ISS astronauts.</i> | 2025 |
| • Talks with female bachelor's students to encourage pursuit of higher studies | 2021–2024 |
| • Participated in the university rocketry club | 2023 |
| • Organized and participated in public outreach stargazing events | 2019–2021 |
| • Led a coding hackathon team for female high school students
<i>My team won first place.</i> | 2018 |
| • Volunteered as a mentor in SheCodes
<i>Coding workshops for women.</i> | 2016–2019 |