

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	2021-
	MSc in Physics , The Hebrew University of Jerusalem Thesis: <i>Black Holes Testing General Relativity, Revisited</i> Advisor: Nicholas C. Stone	2019–2021
	BSc in Applied Mathematics , Bar-Ilan University Studied simultaneously with high school: “The Youth Gifted in Mathematics program”	2011–2014
TEACHING	Teaching Assistant , The Hebrew University of Jerusalem Physics 77101: Mechanics and Special relativity Physics 77401: Analytical Electrodynamics	2023–2024
	Teaching Assistant , The Hebrew University of Jerusalem Physics 77101: Second-year BSc lab course	2019–2023
PROFESSIONAL EXPERIENCE	Full Stack Developer , Intelligence Corps, IDF Developed microservices and web applications using Node.js, Angular, MSSQL, and ElasticSearch.	2016–2019
	Automation Developer , Intelligence Corps, IDF Developed .NET automation frameworks using Selenium. Designed CI plans and testing infrastructure using Bamboo.	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	<p>a) Published:</p> <p>Alush, Y., & Stone, N. C. (2025). “Late-Time Evolution of Magnetized Disks in Tidal Disruption Events”. ApJ 993 14.</p> <p>Alush, Y., & Stone, N. C. (2022). “Revisiting Stellar Orbits and the Sgr A* Quadrupole Moment”. Physical Review D, 106(12), 123023.</p> <p>b) Submitted:</p> <p>Alush, Y., Stone, N. C., van Velzen, S. “How Flat is a Plateau? Evolution of Late-Time TDE Disks”. arXiv:2510.24696.</p> <p>c) Near Submission:</p> <p>Alush, Y., Stone, N. C., Hughes, S. A. “EMRIs in Kerr Spacetime: The Role of Inclination Diffusion”. https://yaelalush.com/Alush+2025.pdf</p>
TALKS & POSTERS	<ul style="list-style-type: none"> • UCLA seminar, Nov. 2025 • ITC Luncheon, Harvard, Nov. 2025 • THEA seminar, Columbia, Nov. 2025 • Princeton Seminar, Nov. 2025 • 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	<ul style="list-style-type: none"> • Volunteered as an academic advisor in the Ramon SpaceLab program 2025 <i>Middle school students design experiments that are launched into space and conducted by ISS astronauts.</i> • 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 2018 <i>My team won first place.</i> • Volunteered as a mentor in SheCodes 2016–2019 <i>Coding workshops for women.</i>
