

# Goni Halevi

---

Physics Department, Illinois Tech  
Pritzker Science Center  
3101 S. Dearborn St  
Chicago, IL, 60616

[ghalevi@iit.edu](mailto:ghalevi@iit.edu)  
[goni@northwestern.edu](mailto:goni@northwestern.edu)  
[gonihalevi.github.io](https://github.com/gonihalevi)

Research Interests	High-energy computational astrophysics <i>Transient phenomena, black holes, neutron stars, nucleosynthesis, accretion, MHD</i>
Academic Positions	<b>Illinois Institute of Technology, Lewis College of Science and Letters</b> <i>Aug. 2024– present:</i> Assistant Teaching Professor <b>Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA), Northwestern University</b> <i>Aug. 2024– present:</i> CIERA Visiting Scholar <i>Sept. 2023–Aug. 2024:</i> CIERA Postdoctoral Fellow
Education	<b>Princeton University</b> PhD, Astrophysical Sciences, Aug. 2023 <b>University of California, Berkeley</b> BA, Physics & BA, Astrophysics, 2017 ( <i>with distinction in general scholarship</i> )
Awards & Fellowships	<i>CIERA Postdoctoral Fellowship</i> , Northwestern University, 2023-2026 <i>Vera Rubin Postdoctoral Fellowship</i> , University of California, Santa Cruz, 2023-2024 <i>Graduate Student Fellowship (Math/Physics)</i> , Prison Teaching Initiative, 2020-23 <i>(Inaugural) Annual Equity Prize</i> , Princeton Astrophysical Sciences, 2022 <i>Graduate Research Fellowship</i> , National Science Foundation, 2019-22 <i>Outstanding Graduate Student Instructor</i> , UC Berkeley, 2017 <i>Commencement Speaker (\$1000)</i> , UC Berkeley Astronomy Dept., 2017 <i>Google Lick Pre-doctoral Fellowship</i> , Google/Lick Observatory, 2016–17 <i>Daniel Edward Wark Award (\$5000)</i> , UC Berkeley Astronomy Dept., 2015
Publications	18 refereed co-authored publications (with 3 more in review), including 3 first-author publications, 1 of which is co-authored with an advisee ( $h$ -index = 11) on <a href="#">ADS</a> , <a href="#">arXiv</a> , or <a href="#">ORCID</a>
Selected Presentations	<b>Colloquia &amp; seminars</b> * <i>Geo/Astrophysical Fluid Dynamics Seminar</i> , UC Santa Cruz (Remote), Oct. 2024 * <i>Physics Colloquium</i> , Illinois Institute of Technology, IL, Oct. 2024 * <i>TAPIR Seminar</i> , CalTech, Pasadena, CA, June 2024 * <i>FLASH Seminar</i> , UC Santa Cruz, CA, Nov. 2023 * <i>GRAPPA Colloquium</i> , University of Amsterdam, NL, May 2023 * <i>THEA seminar</i> , Columbia, NYC, Dec. 2022 * <i>CIERA Theory Group Meeting</i> , Northwestern, IL, Oct. 2022 * <i>High-Energy Astro Journal Club</i> , U Chicago, IL, Apr. 2022 * <i>Physics Colloquium</i> , Franklin and Marshall College, PA, Apr. 2022 * <i>Astronomy Seminar</i> , UW Madison (remote), Nov. 2020 <b>Workshops &amp; Conferences</b> <i>Rise-Time</i> , Purdue University, IN, Aug. 2024 * <i>Turbulence in the Universe</i> , KITP, UC Santa Barbara, CA, Feb. 2024 * <i>Modeling plasmas around black holes</i> , Lorentz Center, Leiden, NL, Sept. 2023 <i>Microphysics in Computational Relativistic Astrophysics</i> , ECT*, Trento, IT, Sept. 2023 * <i>Multi-messenger astro in the gravitational wave era</i> , YITP, Kyoto, JP, Oct. 2019

\* = invited

Allocations	<b>Computing Resources</b> PI, NERSC (DOE Mission Science) AY 2025; 18,000 GPU-hours (worth ~\$36,000) PI, NERSC (DOE Mission Science) AY 2024; 40,000 GPU-hours (worth ~\$80,000) Co-I, ACCESS Discover (NSF) 2024, 22,500 GPU-hours (worth ~\$45,000) PI, ACCESS Explore (NSF) 2024, 3,000 GPU-hours (worth ~\$6,000) <b>Grants</b> Co-I, Support for Open-Source Tools, Frameworks, and Libraries (NASA) 2025; \$918,560.00 (PI: Radice)
Service	<i>Reviewer</i> , National Science Foundation (NSF), 2025 <i>Faculty Advisor</i> , Society of Physics Students, Illinois Tech, 2024– <i>Faculty Judge</i> , Welcome Week Poster Day, Illinois Tech, 2024 <i>Affinity Groups Action Team</i> , CIERA, Northwestern University, 2024 <i>Admissions Committee</i> , REACH Program, CIERA, Northwestern University, 2024 <i>Admissions Committee</i> , REU Program, CIERA, Northwestern University, 2024 <i>Mentorship Action Team</i> , CIERA, Northwestern University, 2023-24 <i>Mentorship Committee</i> , Astrophysical Sciences, Princeton, 2021-22 <i>LGBTQ+ Panel</i> , APS Conference for Undergraduate Women in Physics (CUWiP), Temple University, 2020 <i>Executive Board</i> , Princeton University Women in Physics, 2019-21 <i>Peer Reviewer</i> , Monthly Notices of the Royal Astronomical Society, 2019– <i>Graduate Student Mentor</i> , Científico Latino, 2019 <i>Peer Reviewer</i> , The Astrophysical Journal, 2018– <i>Co-founder</i> , AstroJustice Discussion Group, Dept. of Astrophysical Sciences, Princeton University, 2018 <i>Co-founder, Graduate Student Representative</i> , Climate Committee for Equity and Inclusion, Dept. of Astrophysical Sciences, Princeton University, 2018-21 <i>Co-founder, Facilitator</i> , AstroJustice Discussion Group, UC Berkeley, 2015-17 <i>Undergraduate Coordinator</i> , Society for Women in the Physical Sciences, UC Berkeley, 2015-17 <i>Co-founder, Organizing Committee</i> , Undergraduate Astronomy Society, UC Berkeley, 2015-17 <i>Vice President</i> , Society of Physics Students, UC Berkeley, 2015-16 <i>Outreach Coordinator</i> , Society of Physics Students, UC Berkeley, 2014-15
Mentorship	<b>Formal research advising</b> Ayanna Mann (Howard undergrad, in progress) Pavani Jairam (Northwestern grad student, in progress) Belinda Wu (Princeton undergrad, resulted in publication) <b>Formal non-research mentorship</b> Northwestern (1 grad student), Princeton (3 undergrads, 2 grad students) <b>+ 10-20 informal mentoring relationships</b>
Outreach	<i>Volunteer</i> , Astronomy Conversations, Adler Planetarium, Chicago, 2024– <i>Astronomy on Tap Speaker</i> , Chicago, IL, 2023 <i>Public Observing Volunteer</i> , Peyton Observatory, 2018-19 <i>Volunteer Astronomer</i> , Public Programs Series, Lick Observatory, 2015-19

Teaching

**Illinois Institute of Technology– Physics (*Undergraduate Courses*)**  
 Instructor of Record, “Physics II: E&M” (PHYS 221), 2024

**Northwestern University– Physics & Astronomy (*Grad Courses*)**  
 Invited Guest Lecturer, “Advanced Topics: Supermassive Black Holes,” 2024

**Princeton University– Astrophysical Sciences (*Undergraduate Courses*)**  
 Assistant in Instruction & Invited Guest Lecturer, “Black Holes,” 2023  
 Assistant in Instruction, “Topics in Modern Astronomy,” 2022  
 Assistant in Instruction, “Life in The Universe,” 2021  
 Assistant in Instruction, “Cosmology,” 2020  
 Assistant in Instruction, “The Universe,” 2019

**Prison Teaching Initiative (*Raritan Valley Community College Courses*)**  
 Head instructor, “Beginning Mathematics,” Edna Mahan Correctional Facility, 2023  
 Head instructor, “Introductory Physics (with Lab),” East Jersey State Prison, 2020  
 Head instructor, “Elementary Algebra,” East Jersey State Prison, 2019  
 Instructor, “Astronomy (with lab),” East Jersey State Prison, 2018

**UC Berkeley– Astronomy (*Undergraduate Courses*)**  
 Student Instructor, “Introduction to Astrophysics II,” 2016 & 2017  
 Student Instructor, “Introduction to General Astronomy,” 2015 & 2016

**Cambridge Center for International Research (*Advanced High School*):**  
 Teaching Assistant, “The Astrophysics of High-Density Objects,” 2023

**Warrior-Scholars Project (*Research Focused, College Prep*):**  
 Research Project Leader, “Modeling and Detecting Exoplanets,” 2022