Goni Halevi

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Education

Princeton University
Ph.D., Astrophysical Sciences, 2023 (expected)
M.A., Astrophysical Sciences, 2019
University of California, Berkeley
B.A., Physics & B.A., Astrophysics, 2017

Scientific Interests

High-energy, nuclear, computational astrophysics
Transients, compact objects, thermonuclear burning, r-process, accretion, MHD

Awards and Fellowships

Graduate Student Fellowship (Math/Physics), Prison Teaching Initiative, 2020–
Graduate Research Fellowship, National Science Foundation, 2019-2022
Outstanding Graduate Student Instructor, UC Berkeley, 2017
Commencement Speaker ($1000), UC Berkeley Astronomy Dept., 2017
Google Lick Pre-doctoral Fellowship, Google/Lick Observatory, 2016–2017
Daniel Edward Wark Award ($5000), UC Berkeley Astronomy Dept., 2015

Presentations

Selected talks and seminars (* = invited)

*"Toward more realistic simulations of astrophysical transients," *High-Energy Astro Journal Club*, University of Chicago, Apr. 2022

*"Panning for gold: The formation of heavy elements," *Physics Colloquium*, Franklin and Marshall College, Apr. 2022

*"Nuclear-MHD modeling of WD transients," *Astronomy Seminar*, Indiana University (remotely), Apr. 2021

*"Nuclear-MHD modeling of WD transients," *Astronomy Seminar*, UW Madison (remotely), Nov. 2020

"HSC-XD: A new X-ray search for AGN in dwarf galaxies out to $z \sim 1$," *Session on AGN & Quasars*, AAS 235, Honolulu, Jan. 2020

*"Jet-driven core-collapse supernovae as a candidate site for r-process nucleosynthesis," *Multi-Messenger astrophysics in the gravitational wave era*, Yukawa Institute for Theoretical Physics, Kyoto, Oct. 2019

*"Implementation of Nuclear Reactions in Athena++," *Athena++ Developers Meeting*, UNLV, Mar. 2019

*"Jet-driven core-collapse supernovae as a candidate site for r-process nucleosynthesis," *Filippenkopalooza Pre-Meeting*, UC Santa Cruz, Aug. 2018

*"Jet-driven core-collapse supernovae as a candidate site for r-process nucleosynthesis," *NS mergers for non-experts*, MSU, May 2018

*"Jet-driven core-collapse supernovae as a candidate site for r-process nucleosynthesis," *MHD group meeting*, Princeton University, Mar. 2018

Selected Publications

Complete List: ADS/arXiv

Stahl, ..., **Halevi**, et al. (2019). "Lick Observatory Supernova Search Follow-Up Program: Photometry Data Release of 93 Type Ia Supernovae" (*MNRAS*)

Halevi et al. (2019) "HSC-XD 52: An X-ray detected AGN in a low-mass galaxy at $z \sim 0.56$" (*ApJL*)

de Jaeger, ..., **Halevi**, et al. (2019) "The Berkeley sample of Type II supernovae: BVRI light curves and spectroscopy of 55 SNe II" (*MNRAS*)

Mösta, Roberts, **Halevi**, et al. (2018) "r-process Nucleosynthesis from Three-dimensional Magnetorotational Core-collapse Supernovae" (*ApJ*)

de Jaeger, ..., **Halevi**, et al. (2018) "SN 2016esw: a luminous Type II supernova observed within the first day after the explosion" (*MNRAS*)

Halevi & Mösta (2018) "r-Process nucleosynthesis from three-dimensional jet-driven core-collapse supernovae with magnetic misalignments" (*MNRAS*)

Teaching

East Jersey State Prison (Raritan Valley Community College)
Head instructor, "Introductory Physics (with Lab)", Spring 2020
Head instructor, "Elementary Algebra", Fall 2019
Instructor, "Astronomy", Fall 2018

Dept. of Astrophysical Sciences, Princeton University
Assistant in Instruction, "Topics in Modern Astronomy", Spring 2022
Assistant in Instruction, "Cosmology", Spring 2020
Assistant in Instruction, "The Universe", Spring 2019

Dept. of Astronomy, UC Berkeley
Student instructor, "Introduction to Astrophysics II", Spring 2016/2017
Student instructor, "Introduction to General Astronomy", Fall 2015/2016

Outreach, Leadership, Service

Peer Reviewer, Monthly Notices of the Royal Astronomical Society, 2019–
Peer Reviewer, The Astrophysical Journal, 2018–
Research Project Leader, Warrior-Scholars Project (Princeton), 2022
Mentorship Committee, Dept. of Astrophysical Sciences, Princeton University, 2021–
Graduate Student Mentor, Científico Latino, 2019
Executive Board Member, Princeton University Women in Physics, 2019-2021
Co-founder, Graduate Student Representative, Climate Committee for Equity and Inclusion, Dept. of Astrophysical Sciences, Princeton University, 2018–2021
Public observing volunteer, Peyton Observatory, 2018-2019
Volunteer Astronomer, Public Programs Series, Lick Observatory, 2015-2019
Co-founder, facilitator, AstroJustice Discussion Group, UC Berkeley, 2015–17
Undergraduate coordinator, Society for Women in the Physical Sciences, UC Berkeley, 2015–17
Co-founder, Organizing Committee Member, Undergraduate Astronomy Society, UC Berkeley, 2015–17
Vice president, Society of Physics Students, UC Berkeley, 2015–16
Outreach coordinator, Society of Physics Students, UC Berkeley, 2014–15