

Curriculum Vitae

Alon Gurman

CONTACT

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EDUCATION

Ph.D. in Physics and Astronomy
Tel Aviv University, Tel Aviv, Israel, Expected 2026

B.Sc. in Mathematics and Physics
Tel Aviv University, Tel Aviv, Israel, Magna Cum Laude, 2016-2020

Visiting Ph.D. Student
Center for Computational Astrophysics, Flatiron Institute, 2024-present

PUBLICATIONS

Gurman, A., Sternberg, A., Bialy, A., Cochrane, R. K., Stern, J. "Molecular Hydrogen in High-redshift Damped Lyman- α Absorbers". *arXiv e-prints*, [arXiv:2508.13080](https://arxiv.org/abs/2508.13080) (2025)

Gurman, A., Hu, C. Y., Grudic, M. Y., Steinwandel, U. P., Sternberg, A. "The GHOSDT Simulations: II. Missing Molecules in Simulations of a Self-Regulated Interstellar Medium". *arXiv e-prints*, [arXiv:2507.16700](https://arxiv.org/abs/2507.16700) (2025).

Gurman, A., Steinwandel, U. P., Hu, C. Y., Sternberg, A. "The GHOSDT Simulations - I. Magnetic Support in Gas Rich Disks". *ApJ*, 984, 142 (2025).

Gurman, A., Hu, C. Y., Sternberg, A., van Dishoeck, E. F., "[CII] Emission in a Self-Regulated Interstellar Medium". *ApJ*, 965, 179 (2024).

Sternberg, A., Bialy, S., **Gurman, A.**, "HI in Molecular Clouds: Irradiation by FUV Plus Cosmic Rays". *ApJ*, 960, 8 (2024).

Sternberg, A., **Gurman, A.**, Bialy, S., "HI-to-H₂ Transitions in Dust-free Interstellar Gas". *ApJ*, 920, 83 (2021).

ACADEMIC HONORS

Tel Aviv University scholarship for excellence in teaching, 2024

Tel Aviv University scholarship for excellence in teaching and research, 2022

Tel Aviv University scholarship for outstanding academic performance in graduate studies, 2021

SEMINAR TALKS

Institute for Theory and Computation Luncheon, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, 2025

NY Area Galaxy Seminar, Center for Computational Astrophysics, New York, 2025

University of Illinois Urbana-Champaign, Illinois, 2025

CCA Coffee Talks, Flatiron Institute, New York, 2025

Stars and Interstellar Medium group seminar, Center for Computational Astrophysics, Flatiron Institute, New York, NY, 2024
Star Formation/ISM Rendezvous seminar, Princeton University, Princeton, NJ, 2024
Astrophysics Seminar, Tel Aviv University, Tel Aviv, Israel, 2024
Astrophysics Seminar, Technion – Israel Institute of Technology, Haifa, Israel, 2024
Galaxy Formation Seminar, Center for Computational Astrophysics, New York, 2023

CONFERENCE TALKS Far-Infrared Fine-Structure Line Workshop, Winona, Minnesota, 2025
VICO-CICO-CCA Cosmic Origins Workshop, Flatiron Institute, New York, 2024
ASCOS - Astronomy and Cosmology Conference, Weizmann Institute of Science, Rehovot, Israel, 2024

TEACHING AND MENTORING Teaching Assistant, Introduction to Astrophysics (physics final year), 2020-2025
Teaching Assistant, 2nd year physics lab, 2020-2025
Co-advisor, Matan Berkovich, Technion – Israel Institute of Technology, Haifa, Israel, 2025-present
Mentor, Meduyakot program for women in exact sciences, Tel Aviv University, 2021

PROFESSIONAL EXPERIENCE Reviewer in Training, Monthly Notices of the Royal Astronomical Society, 2023-present
Research Assistant, MRI motion correction with Frydman Group, Weizmann Institute of Science, 2018-2019
Professional Development for Teachers and Development of Teaching Materials, joint program by Tel Aviv University, Israeli Space Agency, and the Israeli Ministry of Education, 2021-2023

CLIMBING AND MOUNTAINEERING Traveled across the Middle East, Europe, and USA, climbing big walls at elite level such as El Capitan in Yosemite National Park CA, Mt. Hooker in the Wind River Range WY, and Djebel Nasrani in Wadi Rum, Jordan