

# Curriculum Vitae

## Alon Gurman

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### CONTACT

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### EDUCATION

*Ph.D. in Physics and Astronomy*  
Tel Aviv University, Tel Aviv, Israel, Expected August 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- $\alpha$  Absorbers". *ApJ accepted (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 (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

Journal Club Talk, University of California San Diego, San Diego, CA, 2025

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**

The Magnetized Turbulent Universe, Playa del Carmen, Mexico, 2025  
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  
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  
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

**CLIMBING  
AND MOUNTAIN-  
EERING**

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  
U19 sport climbing Israeli national champion, 2011