Sivan Ginzburg sivan.ginzburg@mail.huji.ac.il

APPOINTMENTS

2022 – Senior Lecturer, Racah Institute of Physics, Hebrew University of Jerusalem

2021 – 2022 51 Pegasi b Postdoctoral Fellow, Theoretical Astrophysics, Caltech

2018 – 2021 51 Pegasi b Postdoctoral Fellow, Astronomy Department, UC Berkeley

EDUCATION

2015 – 2018 Ph.D. in Physics, The Hebrew University of Jerusalem. Advisor: Re'em Sari
Exo-planet Formation and Evolution: The Role of Cooling

2009 – 2013 M.Sc. (Magna Cum Laude) in Physics, The Hebrew University of Jerusalem
Advisor: Shmuel Balberg. *Superluminous Supernovae*

2005 – 2008 B.Sc. (Magna Cum Laude) in Mathematics and Physics
The Hebrew University of Jerusalem, Talpiot Program

SELECTED AWARDS & GRANTS

2025 Research grant, The German – Israeli Foundation (GIF)

2024 Personal research and equipment grants, Israel Science Foundation (ISF)

2023 Start-up grant, US – Israel Binational Science Foundation (BSF)

2022 Space research grant, Ministry of Innovation, Science and Technology

2018 51 Pegasi b fellowship, The Heising-Simons Foundation

2017 Arnold Rosenblum prize, Hebrew University

2016 Prof. Rahamimoff travel grant, BSF Foundation

2015 Aharon and Ephraim Katzir study grant, Batsheva de Rothschild Fund

2006 Rector's award, Hebrew University

2005 Bronze medal, International Physics Olympiad, Spain

MENTORING

2024 – Rom Yaakovyan, M.Sc. student at the Hebrew University

2024 – Hagai Bareli, M.Sc. student at the Hebrew University

2023 – Daniel Blatman, Ph.D. student at the Hebrew University

TEACHING

2023 – Lecturer, *Mechanics & Special Relativity / Astrophysics & Cosmology*

2008, 2016 – 2018 Teaching Assistant, *Thermal Physics / Electricity & Magnetism*

PUBLICATIONS (students in the group, including undergraduates, are underlined)

1. Daniel Blatman, Nicholas Rui, **Sivan Ginzburg** & Jim Fuller, 2025, MNRAS, 542, 2345 – 2353. *Seismology and diffusion of ultramassive white dwarf magnetic fields*
2. Rom Yaakovyan, **Sivan Ginzburg**, Jim Fuller & Nicholas Rui, 2025, MNRAS, 541, 764 – 770. *Magnetic dynamos powered by white dwarf superficial convection*
3. Yair Cohen, **Sivan Ginzburg**, Maya Levy, Tal Bar Shalom & Yoav Siman Tov, 2024, MNRAS, 534, 455 – 464. *White dwarf eccentricity fluctuation and dissipation by AGB convection*
4. **Sivan Ginzburg**, 2024, MNRAS Letters, 534, L65 – L70. *Younger age for the oldest magnetic white dwarfs*
5. Daniel Blatman & **Sivan Ginzburg**, 2024, MNRAS Letters, 533, L13 – L18. *Magnetic field breakout in ultramassive crystallizing white dwarfs*
6. Arnab Sarkar, Antonio Rodriguez, **Sivan Ginzburg**, Lev Yungelson & Christopher Tout, 2024, A&A Letters, 686, L19. *Magnetic braking below the cataclysmic variable period gap and the observed dearth of period bouncers*
7. Daniel Blatman & **Sivan Ginzburg**, 2024, MNRAS, 528, 3153 – 3162. *Magnetic field breakout from white dwarf crystallization dynamos*
8. Jordan Conrad-Burton, Alon Shabi & **Sivan Ginzburg**, 2023, MNRAS, 525, 2708 – 2715. *Convective dynamos of black widow companions*
9. **Sivan Ginzburg**, Jim Fuller, Adela Kawka & Ilaria Caiazzo, 2022, MNRAS, 514, 4111 – 4119. *Slow convection and fast rotation in crystallization-driven white dwarf dynamos*
10. Adina Feinstein et al., 2022, AJ, 164, 110. *AU Microscopii in the Far-UV: Observations in Quiescence, During Flares, and Implications for AU Mic b and c*
11. **Sivan Ginzburg** & Eugene Chiang, 2022, MNRAS Letters, 509, L1 – L5. *Eccentric millisecond pulsars by resonant convection*
12. **Sivan Ginzburg** & Eliot Quataert, 2021, MNRAS, 507, 475 – 483. *Novae heat their food: mass transfer by irradiation*
13. Jason Wang et al., 2021, AJ, 161, 148. *Constraining the Nature of the PDS 70 Protoplanets with VLTI/GRAVITY*
14. **Sivan Ginzburg** & Eliot Quataert, 2021, MNRAS, 500, 1592 – 1603. *Black widow formation by pulsar irradiation and sustained magnetic braking*
15. Marta Bryan, **Sivan Ginzburg**, Eugene Chiang et al., 2020, ApJ, 905, 37. *As the Worlds Turn: Constraining Spin Evolution in the Planetary-Mass Regime*
16. Mickey Rosenthal, Eugene Chiang, **Sivan Ginzburg** & Ruth Murray-Clay, 2020, MNRAS, 498, 2054 – 2067. *How consumption and repulsion set planetary gap depths and the final masses of gas giants*
17. **Sivan Ginzburg** & Eugene Chiang, 2020, MNRAS, 498, 680 – 688. *Heavy-metal Jupiters by major mergers: metallicity vs. mass for giant planets*

18. **Sivan Ginzburg** & Eliot Quataert, 2020, MNRAS, 495, 3656 – 3665.
Black widow evolution: magnetic braking by an ablated wind
19. Jason Wang, **Sivan Ginzburg** et al., 2020, AJ, 159, 263.
Keck/NIRC2 L'-Band Imaging of Jovian-Mass Accreting Protoplanets around PDS 70
20. Thaddeus Komacek, Daniel Thorngren, Eric Lopez & **Sivan Ginzburg**, 2020, ApJ, 893, 36. *Reinflation of Warm and Hot Jupiters*
21. **Sivan Ginzburg** & Eugene Chiang, 2020, MNRAS Letters, 491, L34 – L39.
Breaking the centrifugal barrier to giant planet contraction by magnetic disc braking
22. **Sivan Ginzburg** & Eugene Chiang, 2019, MNRAS, 490, 4334 – 4343.
The endgame of gas giant formation: accretion luminosity and contraction post-runaway
23. **Sivan Ginzburg** & Eugene Chiang, 2019, MNRAS, 487, 681 – 690.
The end of runaway: how gap opening limits the final masses of gas giants
24. Maayane Soumagnac, Eran Ofek, Avishay Gal-yam, Eli Waxman, **Sivan Ginzburg** et al., 2019, ApJ, 872, 141. *Supernova PTF12glz: A Possible Shock Breakout Driven through an Aspherical Wind*
25. **Sivan Ginzburg** & Re'em Sari, 2018, MNRAS, 479, 1986 – 1996.
Deep and wide gaps by super Earths in low-viscosity discs
26. **Sivan Ginzburg**, Hilke Schlichting & Re'em Sari, 2018, MNRAS, 476, 759 – 765.
Core-powered mass loss and the radius distribution of small exoplanets
27. **Sivan Ginzburg** & Re'em Sari, 2017, MNRAS, 469, 278 – 285.
Hot-Jupiter core mass from Roche lobe overflow
28. **Sivan Ginzburg** & Re'em Sari, 2017, MNRAS, 464, 3937 – 3944.
Tidal heating of young super-Earth atmospheres
29. **Sivan Ginzburg**, Niraj Inamdar & Hilke Schlichting, 2017, invited review in Formation, Evolution, and Dynamics of Young Solar Systems, ASSL, 445.
Super-Earths: Atmospheric Accretion, Thermal Evolution and Envelope Loss
30. **Sivan Ginzburg**, Hilke Schlichting & Re'em Sari, 2016, ApJ, 825, 29.
Super-Earth Atmospheres: Self-consistent Gas Accretion and Retention
31. **Sivan Ginzburg**, Re'em Sari & Abraham Loeb, 2016, ApJL, 822L, 11.
Blackbody Radiation from Isolated Neptunes
32. **Sivan Ginzburg** & Re'em Sari, 2016, ApJ, 819, 116.
Extended Heat Deposition in Hot Jupiters: Application to Ohmic Heating
33. **Sivan Ginzburg** & Re'em Sari, 2015, ApJ, 803, 111.
Hot-Jupiter Inflation due to Deep Energy Deposition
34. **Sivan Ginzburg** & Shmuel Balberg, 2014, ApJ, 780, 18.
Light Curves from Supernova Shock Breakout through an Extended Wind
35. **Sivan Ginzburg** & Shmuel Balberg, 2012, ApJ, 757, 178.
Superluminous Light Curves from Supernovae Exploding in a Dense Wind