Jared Siegel

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Education

Princeton University — 2027

PhD in Astrophysics

University of Chicago — 2022

BA in Physics
BS in Astrophysics

Publications

First Author

12. **Siegel, J.**, Amon A., et al. *Joint X-ray, kinetic Sunyaev-Zeldovich, and weak lensing measurements: toward a consensus picture of efficient gas expulsion from groups and clusters*, Submitted to ApJ
11. **Siegel, J.**, McCullough, J., Amon A., et al. *Intrinsic alignment demographics for next-generation lensing: Revealing galaxy property trends with DESI Y1 direct measurements*, Submitted to MNRAS
10. **Siegel, J.**, & Melchior, P. *Spatially Resolved Galaxy-Dust Modeling with Coupled Data-Driven Priors*, ApJ, 986, 212 (2025)
9. **Siegel, J.**, Setton, D., Greene, J., et al. *UNCOVER: Significant Reddening in Cosmic Noon Quiescent Galaxies*, ApJ, 985, 125 (2025)
8. **Siegel, J.**, Halverson, S., Luhn, J., Zhao, L., Al Moulla, K., et al. *Quiet Please: Detrending Radial Velocity Variations from Stellar Activity with a Physically Motivated Spot Model*, AJ, 168, 158 (2024)
7. **Siegel, J.**, Kiato, I., Kalogera, V., Berry, C., Maccarone, T., et al. *Investigating the Lower Mass Gap with Low Mass X-ray Binary Population Synthesis*, ApJ, 952, 212 (2023)
6. **Siegel, J.**, Winn, J., Albrecht, S., *Ponderings on the Possible Preponderance of Perpendicular Planets*, ApJ Letters, 950, 1 (2023)
5. **Siegel, J.**, & Rogers, L., *Mass Upper Bounds for Over 50 Kepler Planets Using Low-S/N Transit Timing Variations*, AJ, 164, 139 (2022)
4. **Siegel, J.**, Rubenzahl, R., Halverson, S., & Howard, A., *Into the Depths: a new activity metric for high-precision radial velocity measurements based on line depth variations*, AJ, 163, 260 (2022)
3. **Siegel, J.**, Dwarkadas, V. V., Frank, K. A., & Burrows, D. N., *Can the Fe K-alpha line reliably predict supernova remnant progenitors?*, ApJ, 922, 67 (2021)
2. **Siegel J.**, & Fabrycky, D., *Resonant Chains of Exoplanets: Libration Centers for Laplace Angles*, AJ, 161, 290 (2021)
1. **Siegel, J.**, Dwarkadas, V. V., Frank, K., & Burrows, D. N., *Analysis of XMM-Newton Observations of Supernova Remnant W49B and Clues to the Progenitor*, ApJ, 904, 175 (2020)

Awards and Grants

National Science Foundation

NSF Graduate Research Fellowship — 2022 to present

Princeton University

Centennial Fellowship — 2022 to present

American Astronomical Society

Chambliss Astronomy Student Award — Summer 2020

Teaching

Teaching assistant—Princeton University, Dept. of Astrophysical Sciences — 2023—Present

AST 205 | Planets in the Universe
AST 207 | A Gateway to Science: Observational Astronomy in the James Webb Era
APC 524 | Software Engineering for Scientific Computing

Teaching assistant—University of Chicago, Dept. of A. & A. — 2020—2021

ASTR 211 | Computational Techniques in Astrophysics
ASTR 205 | Intro. to Python Programming with Applications to Astro Statistics