

Sheila Sagar

CURRICULUM VITAE

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EDUCATION

Ph.D. in Astronomy

University of Florida, Gainesville, FL

Expected May 2026

M.S. in Astronomy

University of Florida, Gainesville, FL

May 2022

B.A. in Astronomy and Physics, Cum Laude

Boston University, Boston, MA

May 2020

RESEARCH APPOINTMENTS

Graduate School Fellow, University of Florida Dept. of Astronomy (*Gainesville, FL*)

Aug 2020 – Present

Predctoral Research Fellow, Center for Computational Astrophysics/Flatiron Institute (*New York, NY*)

Jan – Jun 2023

Research Assistant, Boston University Dept. of Physics (*Boston, MA*)

Jan – Aug 2020

Undergraduate Research Assistant, Boston University Dept. of Astronomy (*Boston, MA*)

Jan 2017 – May 2020

Directed Studies Student, CERN (CMS Experiment) (*Geneva, CH*)

Jan – Jul 2019

Intern, NASA Ames Research Center (Kepler/K2 Guest Observer Office) (*Moffett Field, CA*)

Jun – Aug 2018

PUBLICATIONS

As First Author

Sagar, Sheila; Ballard, Sarah; Daniel, Kathryn; Price-Whelan, Adrian; Hyman, Sóley; Gilbert, Gregory; Lam, Christopher

[The Orbital Eccentricities of Planets in the Kinematic Thin and Thick Galactic Disks](#) (2025)

Submitted to the Astronomical Journal (September 2025)

Sagar, Sheila; Ballard, Sarah; Gilbert, Gregory; Albornoz, Mariangel; Lam, Christopher

[The Orbital Eccentricity-Radius Relation for Planets Orbiting M Dwarfs](#) (2025)

In Review at the Astronomical Journal (July 2025)

Sagar, Sheila; Price-Whelan, Adrian M.; Ballard, Sarah; Lu, Yuxi (Lucy); Angus, Ruth; Hogg, David W.

[zoomies: A tool to infer stellar age from vertical action in Gaia data](#) (2024)

The Astrophysical Journal, Volume 977, Issue 1, id.49, 21 pp.

Sagar, Sheila; Ballard, Sarah

[The Orbital Eccentricity Distribution of Planets Orbiting M dwarfs](#) (2023)

Proceedings of the National Academy of Sciences, 120, 23

Sagar, Sheila; Skinner, Julie N.; Muirhead, Philip S.

[Upper Limits on Planet Occurrence around Ultracool Dwarfs with K2](#) (2020)

The Astronomical Journal, Volume 160, Issue 1, id.19, 7 pp.

Sagar, Sheila; Allen, Emily; Duffy, Andrew; Jariwala, Manher

[Student learning outcomes with hybrid computer simulations and hands-on labs](#) (2020)

2020 Physics Education Research Conference Proceedings, 448-453

Minor Contributions

Lam, Christopher et al. (inc. **Sagar, Sheila**)

[A Late-Time Rise in Planet Occurrence Reproduces the Galactic Height Trend in Planet Occurrence](#) (2025)

Submitted to the Astronomical Journal

Fernandes, Rachel et al. (inc. **Sagear, Sheila** and ExoPAG SIG#2)

Are We There Yet? Challenges in Quantifying the Frequency of Earth Analogs in the Habitable Zone (2025)

Submitted to Publications of the Astronomical Society of the Pacific

Tamburo, Patrick et al. (inc. **Sagear, Sheila**)

The Perkins INfrared Exosatellite Survey (PINES) I. Survey Overview, Reduction Pipeline, and Early Results (2022)

The Astronomical Journal, Volume 163, Issue 6, id.253, 18 pp.

Di Guglielmo, Giuseppe et al. (inc. **Sagear, Sheila**)

Compressing Deep Neural Networks on FPGAs to Binary and Ternary Precision with HLS4ML (2021)

Machine Learning: Science and Technology, 2, 015001

SOFTWARE

Author of the Python package **zoomies** (github.com/ssagear/zoomies)

Author of the Python package **photoeccentric** (github.com/ssagear/photoeccentric)

Contributor to the Python package **ALDERAAN** (github.com/gjgilbert/alderaan)

Contributor to the Python package **lightkurve** (github.com/lightkurve/lightkurve)

SELECTED CONFERENCE AND DEPARTMENT TALKS

Sep 2025 (Invited): [Penn State CEHW Seminar](#)

Jul 2025 (Contributed): [Detection & Dynamics of Exoplanets Conference](#)

May 2025 (Invited): CfA SSP Science Bite

May 2025 (Invited): MIT TESS Science Talk

May 2025 (Invited): Boston Univ. Special Astronomy Seminar

Mar 2025 (Invited): Univ. of Connecticut Astronomy Seminar

Mar 2024 (Contributed): Extreme Solar Systems IV Conference (Poster)

Jul 2023 (Contributed): UCSC Other Worlds Laboratory Seminar

Jul 2023 (Contributed): Towards Other Earths Conference

Jun 2023 (Contributed): Emerging Researchers in Exoplanet Science VIII

Jun 2023 (Invited): CCA Predoctoral Fellow Symposium

May 2023 (Invited): CCA Lunch Talk

May 2022 (Contributed): Exoplanets IV Conference (Poster)

PROFESSIONAL SERVICE

(2024-) Member of NASA Science Interest Group (SIG) #2: Exoplanet Demographics

(2024-) Referee for AAS Journals

(2024) NASA Grant Review Panel Executive Secretary

(2023-24) Mentor for UF Women in Astrophysics & Astronomy Mentorship Program

TEACHING & MENTORSHIP EXPERIENCE

Fall 2023: Teaching Assistant for AST 3018 - Astronomy & Astrophysics 1

Summer 2025: Teaching Assistant for Code/Astro Software Development Workshop

Co-advisor for **Mariangel Albornoz**, *UF Undergrad*

Co-advisor for **Kohhei Bessho**, *Waseda University Undergrad (former UF exchange student)*

Co-advisor for **Junhao Zhang**, *Aerospace Medical Technician (former UF undergrad)*

Co-advisor for **Dana Yaptangco**, *Ph.D. student at Imperial College London (former UF undergrad)*

HONORS, FELLOWSHIPS AND AWARDS

(2025) AAS International Travel Grant

(2020) UF Graduate Research Fellowship

(2020) College Prize in Astronomy, Boston University

(2020) Scarlet Key Award, Boston University

(2017-2020) Undergraduate Research Opportunities Program Grant, Boston University

(2017) Clare Boothe Luce Scholar Award, Henry Luce Foundation