

Alex Stephen Polanski

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EDUCATION

University of Kansas Ph.D. in Physics, Advisor: Ian Crossfield	Lawrence, KS 2019–Current
University of California, Santa Barbara B.S. in Physics with a Minor in Astronomy & Planetary Science	Santa Barbara, CA 2017–2019
El Camino College A.S. in Physical Sciences	Gardena, CA 2014–2017

RESEARCH POSITIONS

Graduate Research Assistant Advisor: Ian Crossfield	University of Kansas 2019–Current
Undergraduate Researcher Advisor: Philip Lubin	UC Santa Barbara 2018–2019

DEPARTMENT LEADERSHIP & OUTREACH

- Founding Organizer, KU Astro Nights 2021–2022
Kick-started and continue to organize monthly telescope viewings that are open to the public and routinely gather nearly 60 attendees.
- Founder & President, Graduate Student Organization 2021–2022
Co-founder of the KU Physics & Astronomy Graduate Organization and current president.
- Chair, Physics and Astronomy Locally Organized Assembly Committee 2020–2022
Coordinated a graduate student-led conference to showcase research by students from the University of Kansas physics department.
- Graduate Rep, Physics and Astronomy DEI Committee Committee 2020–2022
One of two Graduate representatives sitting on the Department's Diversity, Equity, and Inclusion committee.
- Science Technology Engineering and Math (STEM) Ambassador 2016–2017
Conducted outreach to local public schools to encourage younger students to pursue science and engineering majors.

TALKS, COLLOQUIA, & POSTERS

- Astronomy Associates of Lawrence (*Baker University, KS*) Feb. 2022
Understanding Exoplanets Through the Stars they Orbit
- KU Astro Nights (*Lawrence, KS*) Feb. 2022
The Pleiades: Cultural Icon of the Winter Sky
- 2021 Keck Science Meeting (*Poster, UC San Diego*) Oct. 2021
Keck Abundance Project: Precise Host-Star Abundances for the JWST Era
- Physics and Astronomy Locally Organized Assembly (*Lawrence, KS*) Feb. 2021
Precise Exoplanet Host Star Abundances for the JWST Era
- AAS 236th Meeting (*Poster, Virtual*) June 2020
Wolf 503b: Super-Earth or Sub-Neptune?
- University of Kansas Astronomy Graduate Colloquium (*Lawrence, KS*) Oct. 2020
Getting Acquainted with the Exoplanet Wolf 503b

TEACHING

- **Teaching Assistant** University of Kansas Spring 2020 –Fall 2020
Astronomy 196 - Introductory Astronomy Lab
- **Head Teaching Assistant** University of Kansas Fall 2019 –Spring 2020
Physics 114 - Introductory Physics Lab
- **Teaching Assistant** El Camino College Fall 2015 –Spring 2017
Astronomy 12 - Observational Astronomy

AWARDS AND GRANTS

- Barbara J. Anthony-Twarog Outreach Award, University of Kansas 2022
- Research Honors Award, UC Santa Barbara 2018
- Undergraduate Research and Creative Activities Grant, UC Santa Barbara 2018
- Letters and Science Dean's Honor List, UC Santa Barbara 2018
- Excellence in Astronomy Award, El Camino College 2016
- International Physics Competition Silver Medal 2016

FIRST AUTHOR PUBLICATIONS

¹A. S. Polanski, I. J. M. Crossfield, et al., “Elemental Abundances for 14 JWST Planet Hosting Targets with *KeckSpec*”, In Progress.

²A. S. Polanski, I. J. M. Crossfield, et al., “Wolf 503 b: Characterization of a Sub-Neptune Orbiting a Metal-poor K Dwarf”, **162**, 238, 238 (2021).

CONTRIBUTING AUTHOR PUBLICATIONS

- ¹J. Brande et al., “A Mirage or an Oasis? Water Vapor in the Atmosphere of the Warm Neptune TOI-674 b”, arXiv:2201.04197 (2022).
- ²P. A. Dalba et al., “The TESS-Keck Survey. VIII. Confirmation of a Transiting Giant Planet on an Eccentric 261 Day Orbit ...”, **163**, 61, 61 (2022).
- ³S. K. Grunblatt et al., “TESS Giants Transiting Giants II: The hottest Jupiters orbiting evolved stars”, arXiv:2201.04140 (2022).
- ⁴A. Chontos et al., “The TESS-Keck Survey: Science Goals and Target Selection”, arXiv:2106.06156 (2021).
- ⁵M. El Mufti et al., “TOI 560 : Two Transiting Planets Orbiting a K Dwarf Validated with iSHELL, PFS and HIRES RVs”, arXiv:2112.13448 (2021).
- ⁶J. Lubin et al., “TESS-Keck Survey IX: Masses of Three Sub-Neptunes Orbiting HD 191939 ...”, arXiv:2108.02208 (2021).
- ⁷M. G. MacDougall et al., “The TESS-Keck Survey. VI. Two Eccentric Sub-Neptunes Orbiting HIP-97166”, **162**, 265, 265 (2021).

ACCEPTED OBSERVING PROPOSALS (PI)

- **Keck/NIRC2 2022B:** *2 Nights* - AO Follow-up of TESS objects of interest

WORKSHOPS AND SUMMER SCHOOLS

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| • Sagan Exoplanet Summer Workshop (<i>Virtual</i>) | July 2020 |
| • JWST Master Class for Proposal Writing (<i>Lawrence, KS</i>) | March 2020 |
| • Dunlap School for Astronomical Instrumentation (<i>Toronto, Ontario</i>) | July 2019 |
| • NASA Community College Aerospace Scholars Program (<i>Pasadena, CA</i>) | April 2016 |

OBSERVING EXPERIENCE

- **Keck I (10m):** HIRES - W.M. Keck Observatory, Hawai‘i. 35 nights.
- **Keck II (10m):** NIRC2 - W.M. Keck Observatory, Hawai‘i. 5 nights.
- **IRTF (3.2m):** iSHELL - NASA Infrared Telescope Facility, Hawai‘i. 1 night.
- **Las Cumbres Observatory:** 0.4 Meter Telescopes - Multiple Locations.

PROFESSIONAL PROGRAMS & SOCIETIES

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| • Sigma Pi Sigma | 2020 – Current |
| • APS Bridge Program | 2019 – Current |