# Jack Lubin

Curriculum Vitae

**Contact Information** 

Jack Lubin

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# **EDUCATION**

Ph.D. Physics Expected  $\sim 2024$ 

University of California, Irvine

Masters of Science, Physics 2020

University of California, Irvine

Bachelors of Arts, Physics and Applied Mathematics 2016

Vanderbilt University

# **APPOINTMENTS**

Ph.D. Candidate September 2018 - Present

University of California, Irvine

Outdoor Services Summer 2018

Billy Caspar Golf

Associate Data Engineer June 2016 - September 2017

Capital One Financial

Physics Tutor September 2015 - June 2016

Vanderbilt, Athletics Department

Research Experience for Undergraduates (REU) Summer 2015

Vanderbilt, Dept. of Physics and Astronomy

Outdoor Services Summer 2014

Billy Caspar Golf

# TEACHING EXPERIENCE

# Teaching Assistant

September 2018 - Present

Department of Physics and Astronomy, UCI

• Phys 52C, Fundamentals of Experimental Physics Lab, Statistics	Spring 2021
• Phys 138, Galactic Astrophysics (online, 2nd time)	Winter 2021
• Phys 20A, Introduction to Astronomy (online, 2nd time)	Winter 2021
• Phys 7C, Classical Physics: Kinematics, Energy, and Gravity (online)	Spring 2020
• Phys 138, Galactic Astrophysics	Winter 2020
• Phys 18, How Things Work	Winter 2020
• Phys 20A, Introduction to Astronomy	Fall 2019
• Phys 51A, Modern Physics	Spring 2019
• Phys 7D, Classical Physics: Electricity and Magnetism	Winter 2019
• Phys 52A, Fundamentals of Experimental Physics Lab, Wave Theory	Fall 2018

# HONORS, AWARDS & MEMBERSHIPS

$Highest\ Honors\ in\ Astronomy$ — For successful defense of undergrad honors thesis	2016
$Larry\ Ross\ Cathey\ Award$ – For best undergrad honors thesis in astronomy	2016
Sigma Pi Sigma – Member	2016

#### PRESENTATIONS

"TKS IX: HD 191939 Hosts a Multi-Planet System", Emerging Researchers in Exoplanet Science (ERES) 2021, Talk. Virtual, May 24, 2021.

"My Research in Exoplanets", UCI Undergraduate Astronomy Club, Talk. Virtual, February 3, 2021.

"TKS V: HD 191939 Hosts a 5 Planet System", American Astronomical Society (AAS) 237th Meeting Oral Session 117, Talk. Virtual, January 11, 2021.

 $Teaching\ Assistant\ Professional\ Development\ Training,$  Panel Member. Virtual, November 5, 2020

The Search for M-M Eclipsing Binaries, Vanderbilt University Science Fair, Poster. September 17, 2015.

### COMMUNITY OUTREACH

Science Olympiad Test Writer, Orange County Regional. Authored, proctored, and scored the Astronomy B and Astronomy C tests for local 5th and 6th graders. Hosted at UCI, February 15, 2020.

# PRESS COVERAGE

"Astronomers Nix Idea Of Super-Earth Around Barnard's Star", Forbes, May 18, 2021 https://www.forbes.com/sites/brucedorminey/2021/05/18/astronomers-nix-idea-of-super-earth-around-barnards-sta?sh=7f57afca842a

"A very stealthy alias: the impostor planet of Barnard's star", HPF Blog, May 17, 2021 https://hpf.psu.edu/2021/05/17/barnard/

"Astronomers use new technology developed with help from UC Irvine professor to look for habitable planets", LA Times, March 11, 2019 https://www.latimes.com/socal/daily-pilot/news/tn-dpt-me-hpfuci-20190311-story.html

#### **PUBLICATIONS**

# First Author

Stellar Activity Manifesting at a One Year Alias Explains Barnard b as a False Positive https://arxiv.org/abs/2105.07005. May 18, 2021.

A Bright Short Period M-M Eclipsing Binary from the KELT Survey: Magnetic Activity and the Mass-Radius Relationship for M-dwarfs https://arxiv.org/abs/1706.02401. June 7, 2017.

#### $N\ Author$

TKS X: Confirmation of TOI-1444b and a Comparative Analysis of the Ultra-short-period Planets with Hot Neptunes https://arxiv.org/abs/2105.08844 May 20, 2021

 $The\ TESS\text{-}Keck\ Survey\ IV:\ A\ Retrograde,\ Polar\ Orbit\ for\ the\ Ultra\text{-}Low\text{-}Density,\ Hot\ Super\text{-}Neptune\ WASP\text{-}107b}$ 

https://arxiv.org/abs/2101.09371 January 22, 2021

The TESS-Keck Survey II: An Ultra-Short Period Rocky Planet and its Siblings Transiting the Galactic Thick-Disk Star TOI-561

https://arxiv.org/abs/2009.03071 September 7, 2020

TKS III: A Stellar Obliquity Measurement of TOI-1726 c https://arxiv.org/abs/2008.12397 August 27, 2020

A warm Jupiter transiting an M dwarf: A TESS single transit event confirmed with the Habitable-zone Planet Finder

https://arxiv.org/abs/2007.07098 June 14, 2020

Persistent starspot signals on M dwarfs: multi-wavelength Doppler observations with the Habitable-zone Planet Finder and Keck/HIRES https://arxiv.org/abs/2005.09657 May 19, 2020

The multi-planet system TOI-421 – A warm Neptune and a super puffy mini-Neptune transiting a G9 V star in a visual binary

https://arxiv.org/abs/2004.10095 April 21, 2020

TOI-1235~b: a keystone super-Earth for testing radius valley emergence models around early M dwarfs https://arxiv.org/abs/2004.06682 April 14, 2020

The TESS-Keck Survey I: A Warm Sub-Saturn-mass Planet and a Caution about Stray Light in TESS Cameras

https://arxiv.org/abs/2003.10451 March 23, 2020