Erik Petigura

Contact

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Education

University of California, Berkeley — May 2015
Ph.D. in Astrophysics
Thesis Title: *The Prevalence of Earth-size Planets Orbiting Sun-like Stars*
Thesis Advisor: Geoffrey Marcy

University of California, Berkeley — Dec 2011
M.A. in Astrophysics

University of California, Berkeley — May 2010
B.A. in Physics and Astrophysics

Academic Employment

Hubble Fellow, California Institute of Technology	2015–
Visiting Graduate Student, Institute for Astronomy	2013–2014
Graduate Student Researcher, UC Berkeley	2013–2015
NSF Graduate Research Fellow, UC Berkeley	2010–2013

Research Interests

Demographics of extrasolar planets; planet formation and evolution; detailed characterization of exoplanets by radial velocities and transit timing variations; spectroscopy of exoplanet atmospheres; precision stellar astrophysics; high performance computing; signal processing; and machine learning.

Awards & Honors

Mary Elizabeth Uhl Prize, UC Berkeley Astronomy Department	May 2015
2013 Cozzarelli Prize, National Academy of Sciences [Press Release]	Apr 2014
Block Award, Aspen Center for Physics	Feb 2013
American Physical Society Apker Prize Finalist	Sep 2010
Hertz Fellow Finalist	Feb 2010
University Medal Finalist, UC Berkeley	May 2010
Isidore Pomeranz Scholarship, UC Berkeley Physics Department	May 2010
Dorothea Klumpke Roberts Prize, UC Berkeley Astronomy Department	May 2010

Teaching Experience

Astro-ph discussion leader and organizer – Caltech	Fall 2015–
Graduate Student Instructor: The Planets – UC Berkeley	Spring 2011
Guest Lecturer: The Planets – UC Berkeley	Apr 2011
Graduate Student Instructor: Optical/IR Lab – UC Berkeley	Fall 2011

Mentorship

Trevor David, Caltech Graduate Student — 2015–
Serving as a co-adviser with Lynne Hillenbrand on several projects to study planet formation around young stars. This includes the discovery of K2-33b, a Neptune-sized planet transiting a newborn star (published in *Nature*).

Samuel Yee, Caltech Undergraduate — 2016–
Advising Samuel on a project to create an open-source library of high resolution, high signal-to-noise spectra of touchstone stars spanning the HR diagram and the development of an automated classification algorithm [Project Website].

Invited Talks

Colloquium, University of Texas, Austin	Oct 2016
Fellows at the Frontiers, Northwestern University	Sep 2016
Colloquium, Astronomy Department Tokyo University	Mar 2016
GPS Division Seminar, Caltech	Feb 2016
iPLEX Seminar, UCLA	Oct 2015
Physics Department Colloquium, University of San Francisco	Oct 2015
Caltech Astronomy Department Tea Talk	Jan 2015
Plenary Talk, Origins 2014, Nara, Japan	Jul 2014
Astronomy Department Colloquium, University of Hawai'i	Jan 2014
Second Kepler Science Conference, NASA Ames	Nov 2013
FLASH Talk, UC Santa Cruz	Apr 2013
Yuk Lunch Seminar, CalTech	Mar 2013
Bay Area Exoplanet Science Meeting, SETI Institute, California	Sep 2012

Contributed Talks

Keck Science Meeting, 2016	Sep 2016
Extreme Solar Systems III, Kona, Hawai'i	Nov 2015
K2 Science Meeting, Santa Barbara, California	Oct 2015
Keck Science Meeting, 2015	Sep 2015
AAS Meeting, Seattle, Washington	Jan 2015
Toward Other Earths: The Star-Planet Connection, Porto, Portugal	Sep 2014
Exoplanets in Multi-body Systems in the Kepler Era, Aspen, Colorado	Feb 2013
AAS Meeting, Long Beach, California	Jan 2013
AAS Meeting, Anchorage, Alaska	Jun 2012
Extreme Solar Systems II, Jackson Hole, Wyoming	Sep 2011
APS April Meeting, Denver, Colorado	May 2009

Grants & Proposals

- NASA, K2 Guest Observer - Cycle 3 (2016) "The K2 M Dwarf Program: Fields 8 and 10" ($100,000, Co-I, PI: Ian Crossfield)
- NASA, K2 Guest Observer - Cycle 2 (2016) "The K2 M Dwarf Program: Fields 6 and 7" ($100,000, Co-I, PI: Ian Crossfield)
- NASA ADAP Grant (2015) "Discovery and Characterization of Small Planets from the K2 Mission" (Co-I, PI: Andrew Howard)
- Spitzer/HST Proposal (2015) "Orbit and Atmospheric Composition of EPIC-2037b" (PI, Spitzer: 29 hours, HST: 9 orbits)
- Keck Proposal (2016A) "Internal Structure of Sub-Saturn Planets" (PI, 4 nights)
- Automated Planet Finder Proposal (2015, PI, 9 nights)
- Computing time at NERSC (2015, PI, 100000 hours)
- Computing time at NERSC (2014, PI, 200000 hours)
- Computing time at NERSC (2013, PI, 30000 hours)
- *K2* targets for campaigns 2 and 3 (2013, PI)