Kevin Charles Schlaufman

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Professional Appointments

Assistant Professor, William H. Miller III Department of Physics & Astronomy, JHU — 2017 – Present
Carnegie-Princeton Fellow, Carnegie Observatories and Princeton University — 2015 – 2016
Kavli Fellow, Kavli Institute for Astrophysics and Space Research, MIT — 2012 – 2015
Senior Data Scientist, LinkedIn Corporation — 2011 – 2012

Education

UC Santa Cruz, MS and PhD in Astronomy and Astrophysics — 2006 – 2011
Stanford University, MS in Scientific Computing and Computational Mathematics — 2004 – 2006
Statistics Concentration
Penn State, BS in Mathematics and BS in Astronomy and Astrophysics — 2000 – 2004
Honors and High Distinction plus minor in Physics

Honors and Awards

Tuve Fellowship, Carnegie Institution for Science Earth & Planets Laboratory — 2023
Sabbatical Visiting Researcher Award, Flatiron Institute Center for Computational Astrophysics — 2021
Infinite Kilometer Award, MIT School of Science — 2013
Recognized for routinely working beyond my assigned responsibilities and for exceptional contributions to the community
Chancellor's Dissertation-Year Fellowship, UC Santa Cruz Graduate Division — 2010 – 2011
Recognized as part of the top 10% of my PhD graduating class and awarded $35,000 grant
Graduate Research Fellowship, National Science Foundation — 2007 – 2010
Recognized as part of the top 5% of all science and engineering PhD students nationwide and awarded $121,500 grant
Whitford Prize, UC Santa Cruz Astronomy and Astrophysics Department — 2008
Recognized as outstanding overall student in the first two years of the PhD program
Marshal Award, Penn State Astronomy and Astrophysics Department — 2004
Recognized as the top undergraduate major in my graduating class
Evan Johnson Award, Penn State Mathematics Department — 2003 & 2004
Recognized as one of the top students in the mathematics major
Kermit C. Anderson Scholarship, Penn State Mathematics Department — 2003
Recognized as one of the top students in the mathematics major
Evan Pugh Scholar Award (Senior), Penn State — 2003
Recognized as top 0.5% percent of graduating class
Elected to ΦBK, Penn State — 2003

Principal Investigator Grants

NSF Astronomy and Astrophysics Research Grant ($633,401) — 2023 – 2026
All-sky Precise Stellar Ages for Galactic and Stellar Archaeology
NASA Exoplanets Research Program ($549,052) — 2023 – 2026
Exploring Planet Formation with Accurate, Precise, and Homogeneous Host Star & Exoplanet Atmospheric Elemental Abundance Inferences
JPL Keck 2022A Principal Investigator Data Award ($20,000) — 2022 – 2024
Galactic and Stellar Archaeology with Keck and Kepler
NASA Astrophysics Data Analysis Program ($482,657) — 2021 – 2024
Galactic and Stellar Archaeology with Archival GALEX, 2MASS, and WISE Data
NSF Astronomy and Astrophysics Research Grant ($367,859) — 2020 – 2024
Exoplanet System Ages from Galactic Kinematics and their Impact on Planet Formation and Evolution
NASA TESS Guest Investigator Program Cycle 2 ($50,000) — 2020 – 2023
Using the Metallicity Effect for Small Planets to Explore Planet Formation
Maryland Space Grant Consortium ($20,000) — 2020
A Research Fellowship Program For High-achieving Underrepresented Minorities
Space@Hopkins Seed Grant ($21,668) — 2018 – 2019

New Insights into Planet Formation with NASA's Transiting Exoplanet Survey Satellite (TESS)
Maryland Space Grant Consortium ($14,000) 2018
Undergraduate Research Assistantships in Galactic and Extragalactic Astronomy

Co-principal Investigator Grants

JHU PhD Professional Development Innovation Initiative Program ($5,000) 2020 – 2022
Physics & Astronomy PhD Program Career Events (Co-PI Zakamska)

Co-investigator Grants

NASA Exoplanets Research Program ($624,464) 2022 – 2025
A Three-dimensional Extinction Map for Microlensing Planet Discovery and Characterization (PI Nataf)
STScI JWST Cycle 1 General Observer ($103,495, JHU portion $60,014) 2022 – 2024
Tracing Hot Jupiter Formation and Migration with Volatile and Refractory Element Ratios (PI Lothringer)
STScI HST Cycle 29 General Observer ($118,818) 2021 – 2023
A Comparative Study of Planetary Atmospheres in Low-Metallicity Environments (PI Sing)

Invited Colloquia

Joint Institute for Advanced Study/Princeton University Astrophysics Colloquium October 2023
The Dynamical Evolution of Exoplanet Systems Over Billions of Years
Carnegie Earth & Planets Laboratory, General Seminar November 2022
Exoplanet Host Star Age Inferences and Their Impacts on Models of Planet Formation and Evolution
Indiana University, Astronomy Department Colloquium November 2022
Exoplanet Host Star Age Inferences and Their Impacts on Models of Planet Formation and Evolution
Australian National University, Research School of Astronomy & Astrophysics Colloquium March 2022
Planet Formation and Evolution Revealed by Exoplanet Host Stars in the Galactic Context
University of Maryland, College Park, CTC Theory Lunch November 2021
The Usual Outcomes of the Planet Formation Process in the Solar Neighborhood
Flatiron Institute, Center for Computational Astrophysics Colloquium September 2021
Exoplanet Host Star Age Inferences and Their Impacts on Models of Planet Formation and Evolution
University of Hawaii, Institute for Astronomy Colloquium September 2021
Exoplanet Host Star Age Inferences and Their Impacts on Models of Planet Formation and Evolution
University of Chicago, Astro Tuesday Seminar February 2021
Exoplanet Host Star Age Inferences and Their Impacts on Models of Planet Formation and Evolution
University of Toronto, Astronomy Colloquium February 2021
Exoplanet Host Star Age Inferences and Their Impacts on Models of Planet Formation and Evolution
Johns Hopkins University, Henry A. Rowland Department of Physics & Astronomy Colloquium September 2020
The Formation, Structure, and Evolution of the Most Commonly Found Planets in the Galaxy
Carnegie Institution for Science, Department of Terrestrial Magnetism Weekly Seminar May 2019
Planet Formation and Evolution in the Big Data Era
Columbia University, Department of Astronomy Colloquium February 2019
An Extraordinary Ancient Binary Star System
Johns Hopkins University, Faculty Forum February 2019
Planets Around Other Stars and the Search for Other Earths
Notre Dame University, Department of Physics Astrophysics Seminar January 2019
The Maximum Masses of Planets and the Minimum Metallicities of Long-lived Stars
Johns Hopkins University, IDIES Bi-Monthly Seminar November 2018
The Importance of Broad and Deep Domain Knowledge in Data Intensive Engineering and Science
Yale University, Department of Astronomy Colloquium April 2018
The Maximum Mass of a Planet
Space Telescope Science Institute, Joint JHU/STScI Colloquium February 2018
The Maximum Mass of a Planet
Johns Hopkins University, Henry A. Rowland Department of Physics & Astronomy Colloquium February 2017
What is–and is not–a Planet
Carnegie Institution for Science, Observatories Colloquium November 2016
The Origin of Hot Jupiters
The Ohio State University, Department of Astronomy Colloquium November 2015
The Origin and Fate of Hot Jupiters

California Institute of Technology, Division of Geological and Planetary Sciences Seminar November 2015
The Origin of Planets Found Close to Their Host Star
Johns Hopkins University, Henry A. Rowland Department of Physics & Astronomy Colloquium April 2015
Data-Intensive Astrophysics in the 21st Century: The Oldest Stars and the Origin of Hot Jupiters
Leiden University, Leiden Observatory Colloquium March 2015
Data-Intensive Astrophysics in the 21st Century: The Oldest Stars and the Origin of Hot Jupiters
UC Berkeley, Astronomy Department Colloquium March 2015
Data-Intensive Astrophysics in the 21st Century: The Oldest Stars and the Origin of Hot Jupiters
University of Toronto, Dunlap Institute for Astronomy and Astrophysics Colloquium February 2015
Data-Intensive Astrophysics in the 21st Century: The Oldest Stars and the Origin of Hot Jupiters
Princeton University, Department of Astrophysical Sciences Colloquium February 2015
Data-Intensive Astrophysics in the 21st Century: The Oldest Stars and the Origin of Hot Jupiters
Johns Hopkins University, Henry A. Rowland Department of Physics & Astronomy Colloquium March 2014
Data-Intensive Planet Formation
University of Virginia, Department of Astronomy Colloquium March 2014
Data-Intensive Planet Formation
MIT, Physics Faculty Lunch September 2013
A Planet Puzzle

Seminars

Aarhus University, Stellar Astrophysics Centre Seminar August 2019
The Typical Terrestrial-mass Planet Discovered by Transit Surveys and Its Implications for Planet Formation and Evolution
University of Copenhagen, DARK Cosmology Centre Seminar August 2019
An Extraordinary Ancient Binary Star System
Princeton University/Institute for Advanced Study, Planet/Exoplanet Discussion Group January 2019
The Giant Planet–Host Star Metallicity Correlation for Hot Stars
National Optical Astronomy Observatory, Friday Scientific Lunch Talk May 2018
The Maximum Mass of a Planet
Yale University, Stellar Tea Talk November 2013
The Fate of Hot Jupiters
Harvard-Smithsonian Center for Astrophysics, Solar, Stellar, and Planetary Sciences Seminar May 2013
The Fate of Hot Jupiters (and the Earth too)
Boston University, Department of Astronomy Tuesday Lunch Talk April 2013
The Fate of Hot Jupiters (and the Earth too)
UC Santa Cruz, Friday Lunch Astrophysics Seminar Hour September 2011
Kepler Exoplanet Candidate Host Stars Are Preferentially Metal Rich
Princeton University, Department of Astrophysical Sciences WUNCH Seminar December 2010
Halo Substructure and Milky Way Formation
Harvard-Smithsonian Center for Astrophysics, Institute for Theory and Computation Seminar September 2010
Halo Substructure and Milky Way Formation
Space Telescope Science Institute, Friday Seminar September 2010
Halo Substructure and Milky Way Formation
Penn State, Department of Astronomy and Astrophysics Lunch Talk September 2010
Halo Substructure and Milky Way Formation
Stanford University, KIPAC Cosmology Seminar April 2010
Milky Way Structure and Formation as Revealed By Cold Halo Substructure
UC Santa Cruz, Summer Friday Lunch Astrophysics Seminar Hour July 2009
Super-Earth Formation as Revealed by Kepler
UC Santa Cruz, Summer Friday Lunch Astrophysics Seminar Hour June 2008
The Signatures of the Ice Line and Modest Type I Migration in the Observed Exoplanet Mass-Semimajor Axis Distribution
UC Santa Cruz, Friday Lunch Astrophysics Seminar Hour October 2007
The Stellar Accretion History of the Milky Way Through Halo Substructure

Invited Conference Talks

Planet Characterization in the Solar System and the Galaxy Workshop February 2024
Observational Biases in Exoplanet Classiciation

GRC on the Origins of Solar Systems: Chemical and Dynamical Constraints on Planet Formation June 2023
Introduction to Jupiter and Giant Planet Formation
INT 20R-1b: The r-process and the Nuclear EOS after LIGO-Virgo's Third Observing Run May 2022
The Galactic Chemical Evolution of the Magellanic Clouds Reveal the r-process Enrichment Timescale
Carnegie Exoplanetary Worlds Workshop October 2019
The Future of Exoplanet Demographics with Carnegie Facilities
NASA Goddard–JHU Interaction Day October 2018
Planet Formation in the Next Decade
NASA Goddard–JHU Interaction Day October 2017
Exoplanet Research at JHU
Chesapeake Bay Area Exoplanet Meeting October 2017
Exoplanet Research at JHU
IAUS 317: The General Assembly of Galaxy Halos: Structure, Origin and Evolution August 2015
The Most Ancient Stars in the Milky Way's Halo
Planetary Population Synthesis: The Predictive Power of Planet Formation Theory December 2010
Kepler, Exoplanet Population Synthesis, and Tidal Evolution

Contributed Conference Talks

Supernova Explosions Conference August 2023
Iron-rich Metal-poor Stars as Probes of Type Ia Supernovae Explosion Mechanism(s)
Planetary Systems and the Origins of Life in the Era of JWST May 2023
The Importance of High-precision Stellar Fundamental Parameter and Elemental Abundance Inferences for JWST Studies of Exoplanet Atmospheres
The Star–Planet Connection October 2021
Unbiased Model-independent Relative Ages for Exoplanet Host Stars from Galactic Kinematics
Towards the Comprehensive Characterization of Exoplanets April 2021
Exoplanet Host Star Ages from Galactic Kinematics Reveal the Unexpectedly Divergent Fates of HJ and USP Planets
PLATO ESP 2020 - Planetary interiors and system architectures December 2020
The Impact of PLATO-based Planet Occurrence and Mass–radius Analyses on the Terrestrial-mass Planet Formation Timescale
Exoplanet Demographics November 2020
The Typical Planets Discovered by Transit Surveys and Their Implications for Planet Formation and Evolution
Exoplanets III July 2020
The Typical Planets Discovered by Transit Surveys and Their Implications for Planet Formation and Evolution
First Stars VI March 2020
The Most Metal-poor Stars in the Large Magellanic Cloud
Brown Dwarf to Exoplanet Connection III October 2019
Evidence of an Upper Bound on the Masses of Planets and its Implications for Giant Planet and Brown Dwarf Formation
Chesapeake Bay Area Exoplanet Meeting September 2019
The Typical Terrestrial-mass Planet Discovered by Transit Surveys and Its Implications for Planet Formation and Evolution
Into the Starlight: The End of the Cosmic Dark Ages March 2019
An Ultra Metal-poor Star Near the Hydrogen-burning Limit
Stellar Archaeology as a Time Machine to the First Stars December 2018
An Ultra Metal-poor Star Near the Hydrogen-burning Limit
Exoplanets II July 2018
Evidence of an Upper Bound on the Masses of Planets and its Implications for Giant Planet Formation
Exoplanets Orbiting Hot Stars June 2018
The Giant Planet–Host Star Metallicity Correlation for Hot Stars
Stellar Abundances in Dwarf Galaxies June 2018
The Most Metal-poor Stars in the Large Magellanic Cloud
Chesapeake Bay Area Exoplanet Meeting May 2018
The Maximum Mass of a Planet
Chemical Evolution of the Universe September 2017
The Most Metal-poor Stars in the Large Magellanic Cloud
Kepler & K2 Science Conference IV June 2017
Joint Spectroscopic and Asteroseismic Analysis of Very Metal-poor Stars in the Kepler Field

4th Magellan Science Symposium December 2016
Magellan, Metal-poor Stars, and the $z > 15$ Universe
White Research Conference on Galactic Archaeology & Stellar Physics November 2016
Joint Spectroscopic and Asteroseismic Analysis of Very Metal-poor Stars in the Kepler Field
Exoplanets in the Era of Extremely Large Telescopes September 2016
Exoplanets in Open Clusters in the Era of Extremely Large Telescopes
ExSoCal2016: An Exoplanet Orbital Interaction September 2016
A Long-period Multiple-transiting Giant Planet System with Evidence of High Stellar Obliquity
Astrophysics with the SPHEREx All-sky Spectral Survey February 2016
Metal-poor Stars and Milky Way Formation with SPHEREx
Carnegie Science Origins Meeting October 2015
The Number of Solar System Analogs in the Galaxy
OHP 2015: Twenty Years of Giant Exoplanets October 2015
Architectural and Chemical Insights into the Origin of Hot Jupiters
ExSoCal2015: An Exoplanet Orbital Interaction September 2015
Bayes' Theorem Reveals that Hot Jupiters are not Lonely
XXIX IAU Focus Meeting 1: Dynamical Problems in Extrasolar Planet Science August 2015
Architectural Insights into the Origin of Hot Jupiters
First Stars, Galaxies, and Black Holes: Now and Then June 2015
The Most Ancient Stars in the Milky Way?
8$^{\text{th}}$ Annual MKI Postdoc Symposium April 2015
The Best and Brightest Metal-poor Stars
WISE at 5: Legacy and Prospects February 2015
The Best and Brightest Metal-Poor Stars
The Milky Way and its Stars: Stellar Astrophysics, Galactic Archaeology, and Stellar Populations February 2015
The Best and Brightest Metal-Poor Stars
225th American Astronomical Science Meeting January 2015
The Best and Brightest Metal-Poor Stars
Wide-field InfraRed Surveys: Science and Techniques November 2014
An Infrared Search for the First Stars
Characterizing Planetary Systems Across the HR Diagram July 2014
Observational Insight into the Effect of Stellar Evolution on Exoplanet Systems
7$^{\text{th}}$ Annual MKI Postdoc Symposium May 2014
Planet Formation in Close-In Systems of Multiple Planets
223rd American Astronomical Science Meeting January 2014
The Fate of Hot Jupiters
The Second Kepler Science Conference November 2013
Planet Formation in Kepler Multiplanet Systems
6$^{\text{th}}$ Annual MKI Postdoc Symposium April 2013
The Fate of Hot Jupiters (and the Earth too)
Exoplanets in Multi-body Systems in the Kepler Era February 2013
Metallicity Trends in Kepler Planets
221st American Astronomical Science Meeting January 2013
Hosts of Multiplanet Systems are Preferentially Metal-Rich
The First Kepler Science Conference December 2011
Kepler Exoplanet Candidate Host Stars are Preferentially Metal Rich
217th American Astronomical Science Meeting January 2011
Halo Substructure and Milky Way Formation
Cosmology in Northern California '10 October 2010
Halo Substructure and Milky Way Formation
SEGUE-2 Science Meeting February 2010
The Chemistry, Kinematics, and Origin of Elements of Cold Halo Substructure (ECHOS)
The Milky Way and the Local Group - Now and in the Gaia Era September 2009
The Stellar Accretion History of the Milky Way Through Cold Halo Substructure
Cosmology in Northern California '09 May 2009
Insight Into the Formation of the Milky Way Through Cold Inner Halo Substructure
Santa Cruz Galaxy Formation Workshop 2008 August 2008
The Stellar Accretion History of the Milky Way Through Halo Substructure
Sloan Digital Sky Survey Science: From Asteroids To Cosmology August 2008

The Stellar Accretion History of the Milky Way Through Halo Substructure

Teaching

AS.171.644 Exoplanets and Planet Formation, 5 students, 3 credit hours	Spring 2024
AS.171.611 Stellar Structure and Evolution, 10 students, 3 credit hours	Fall 2023
AS.171.611 Stellar Structure and Evolution, 23 students, 3 credit hours	Spring 2023
AS.171.502 Undergraduate Independent Research, 1 student, 3 credit hours	Spring 2023
AS.171.501 Undergraduate Independent Research, 3 students, 2-3 credit hours	Fall 2022
AS.171.644 Exoplanets and Planet Formation, 4 students, 3 credit hours	Spring 2022
AS.171.502 Undergraduate Independent Research, 1 student, 3 credit hours	Spring 2022
AS.171.597 Independent Research, 1 student, 3 credit hours	Summer 2021
AS.171.610 Numerical Methods for Physicists, 8 students, 4 credit hours	Fall 2020
AS.171.644 Exoplanets and Planet Formation, 6 students, 3 credit hours	Spring 2020
AS.171.301 Electromagnetic Theory II, 23 students, 4 credit hours	Fall 2019
AS.171.610 Numerical Methods for Physicists, 1 student, 4 credit hours	Spring 2019
AS.171.416 Numerical Methods for Physicists, 12 students, 4 credit hours	Spring 2019
AS.171.301 Electromagnetic Theory II, 24 students, 4 credit hours	Fall 2018
AS.171.610 Numerical Methods-Physics, 11 students, 4 credit hours	Spring 2018
AS.171.502 Undergraduate Independent Research, 1 student, 3 credit hours	Spring 2018
AS.171.416 Numerical Methods for Physicists, 1 student, 4 credit hours	Spring 2018
AS.171.301 Electromagnetic Theory II, 28 students, 4 credit hours	Fall 2017
AS.171.597 Independent Research, 1 student, 3 credit hours	Summer 2017
AS.171.644 Exoplanets and Planet Formation, 12 students, 3 credit hours	Spring 2017

Undergraduate Mentorship

Primary research advisees (awards, if any; current professional status)

Le "Chris" Wang (Summer PURA and Dean's ASPIRE Grant; JHU undergraduate)	January 2022 – Present
Keyi Ding (IDIES Summer Student Fellow; JHU undergraduate)	May 2021 – Present
Alejandro Ross (Woodrow Wilson Fellow)	December 2019 – Present
Zack Reeves (Summer PURA; Adjunct Lecturer at CUNY York College)	May 2021 – August 2023
Courtney Carreira (A&A PhD student at UC Santa Cruz)	May 2021 – May 2022
Michael Kruppa (JHU undergraduate)	June 2021 – August 2021
Ying Qin (JHU undergraduate)	May 2021 – August 2021
Turner Woody (Goldwater Scholar and Kerr Award; A&A PhD student at Harvard)	June 2018 – June 2021
Vedant Chandra (IDIES Summer Student Fellow; A&A PhD student at Harvard)	June 2020 – March 2021
Noah Halpern (Data Scientist at Car IQ)	January 2019 – May 2019
Karl Osterbauer (Summer PURA; Software Engineer at DRW)	January 2018 – May 2019
Theo Cooper (Technical Support Engineer at CData Software)	June 2017 – August 2017
Caroline Chin (UROP; economics PhD student at MIT)	June 2013 – August 2013

Academic advisees (current professional status)

Shrutina Shrestha (JHU undergraduate)	May 2021 – Present
Eric Ding	December 2020 – May 2023
Evan Petrosky (physics PhD student at Michigan)	August 2018 – May 2021
Kyle Velez (Photographer at GTP Corp)	August 2020 – April 2021
Andrew King (Software Developer at Old Mission)	August 2017 – May 2020

Graduate Mentorship

Advisees (type of mentorship; current professional status)

Stephen Schmidt III (JHU research mentor)	September 2023 – Present
Xinyu "Cicero" Lu (JHU academic thesis advisor; Science Fellow at Gemini North)	September 2019 – August 2023
Jacob Hamer (JHU thesis advisor; Assistant Curator of Astro Ed at NJSM)	September 2019 – August 2022
Jonathan Aguilar (JHU academic thesis advisor; MIRI Staff Scientist at STScI)	January 2019 – January 2020
Jacob Hamer (JHU research mentor)	September 2017 – August 2019
Xinyu "Cicero" Lu (JHU research mentor)	September 2017 – August 2019
Bin Ren (JHU academic thesis advisor; MSCA European Fellow at OCA)	January 2017 – May 2019

Academic advisees

Gautham Pallathadka (JHU thesis advisory committee)	March 2024 – Present
Zafar Rustamkulov (GBO committee)	March 2024
Nicole Crumpler (JHU thesis advisory committee)	February 2024 – Present
Nicole Crumpler (GBO committee)	November 2023
Elle Hanson (GBO committee)	November 2023
Xinyu "Cicero" Lu (JHU thesis defense committee chair)	June 2023
Nicholas Speeney (GBO committee)	March 2023
Jesse Liebman (GBO committee)	November 2022
Mayuri Sadhasivan (GBO committee)	November 2022
Jacob Hamer (JHU thesis defense committee chair)	July 2022
Yifan "Ada" Chen (JHU thesis defense committee)	June 2022
Brian Welch (JHU thesis advisory committee)	March 2020 – April 2022
Brian Healy (JHU thesis defense committee)	March 2022
Brian Healy (JHU thesis advisory committee)	March 2020 – March 2022
Erini Lambrides (JHU thesis advisory committee)	May 2018 – July 2021
Zackary White (GBO committee)	December 2020
Vincent Morano (GBO committee)	October 2020
Sarah Moran (GBO committee)	April 2020
Kristin Sotzen (GBO committee)	March 2020
Carolina Núñez (GBO committee)	December 2019
Brian Healy (GBO committee)	November 2019
Jacob Hamer (GBO committee)	October 2019
Caroline Huang (JHU thesis defense committee)	September 2019
Caroline Huang (JHU thesis advisory committee)	May 2017 – September 2019
Kirill Tchernyshyov (JHU thesis defense committee)	July 2019
Jonathan Aguilar (JHU thesis advisory committee)	May 2017 – January 2019
Michael Busch (JHU GBO committee)	November 2018
Hsiang-Chih Hwang (JHU GBO committee)	October 2018
Iskandar Atakhodjaev (JHU thesis defense committee)	August 2018
Chi Yan (JHU GBO committee)	February 2018
Lei "Raymond" Feng (JHU thesis defense committee)	January 2018
Devin Crichton (JHU thesis defense committee)	July 2017
Schuyler Wolff (JHU thesis defense committee)	July 2017
Can "Candice" You (JHU thesis defense committee)	June 2017
Bin Ren (JHU GBO committee)	March 2017

Postdoctoral Fellow/Research Scientist Mentorship

Sam Grunblatt	September 2022 – Present
David Nataf (currently Associate Research Scientist at JHU)	September 2021 – August 2022
Henrique Reggiani (currently tenure-track Assistant Astronomer at NSF's NOIRLab)	September 2019 – August 2021

Service Activities

Member, JHU Physics & Astronomy Department Teaching Assignments Committee	2023 – Present
Member, AAS Beyond Academic Careers Advisory Committee (BACAC)	2023 – Present
JHU Member Representative, Association of Universities for Research in Astronomy (AURA)	2022 – Present
Co-chair JHU Physics & Astronomy Department Rowland Fellowship Committee	2022 – Present
Co-chair, SDSS-V Exoplanets Working Group	2021 – Present
Chair, JHU Telescope Time Allocation Committee	2019 – Present
Non-academic career advisor, JHU Physics & Astronomy Department	2018 – Present
Member, Chesapeake Bay Area Exoplanet Meeting Scientific Organizing Committee	2017 – Present
Contributor, JHU Physics & Astronomy Department Physics Fair	2017 – Present
Member, JHU Physics & Astronomy Department Joint JHU/STScI Colloquium Committee	2017 – Present
Referee, AAS Journals, A&A, MNRAS, NASA, NSF, and Science	2011 – Present
Scientific organizing committee, TESS/Kepler Asteroseismic Science Consortium Workshop	2023
External reviewer, HST Cycle 30	2022
Member, JHU Physics & Astronomy Department Computer Committee	2017 – 2021

Member, JHU Physics & Astronomy Department Recruitment Committee	2017 – 2019
Member, Space Telescope Science Institute Exoplanet Search Committee	2018 – 2019
Member, JHU Physics & Astronomy Department Davis Fellowship Committee	2018 – 2019
Member, National Optical Astronomy Observatory Time Allocation Committee	2016 – 2018
Speaker, JHU Center for Astrophysics Research Experience (CARE) Program Lecture Series	2017
Contributor, JHU Physics & Astronomy Department Homecoming Reception	2017
Speaker, JHU Society of Physics Students Lecture Series	2017
Contributor, Pasadena Astronomy Week Astronomy Festival	2016
Contributor, Carnegie Open House	2016
Speaker, Carnegie Observatories Lecture Series	2016
Co-organizer, MIT MKI IAP Activities	2014
Co-organizer, MIT MKI Postdoc Symposium	2013
Speaker, MIT MKI IAP Lecture Series	2013
Member, UC Santa Cruz Astronomy and Astrophysics Department Admissions Committee	2011
Co-organizer, UC Santa Cruz Astronomy and Astrophysics Department FLASH	2010 – 2011
Science speaker, Lick Observatory Summer Visitor's Program	2008 – 2011
Organizer, UC Santa Cruz Astronomy and Astrophysics Department Summer FLASH	2008 – 2010
Graduate representative, UC Santa Cruz Academic Senate Committee on Planning and Budget	2008 – 2010
Chair, UC Santa Cruz Graduate Student Health Insurance Committee,	2008 – 2009
Outreach coordinator, Kavli Institute for Particle Astrophysics and Cosmology	2004 – 2005

Peer-reviewed First-author Publications

Advisee authors are underlined.

16. **Schlaufman, K. C.** & Halpern, N. D. 2021, "The Occurrence-weighted Median Planets Discovered by Transit Surveys Orbiting Solar-type Stars and Their Implications for Planet Formation and Evolution", *Astrophysical Journal*, 921, 24

15. **Schlaufman, K. C.**, Thompson, I. B., & Casey, A. R. 2018, "An Ultra Metal-poor Star Near the Hydrogen-burning Limit", *Astrophysical Journal*, 867, 98

14. **Schlaufman, K. C.** 2018, "Evidence of an Upper Bound on the Masses of Planets and Its Implications for Giant Planet Formation", *Astrophysical Journal*, 853, 37

13. **Schlaufman, K. C.** & Winn J. N. 2016, "The Occurrence of Additional Giant Planets Inside the Water-Ice Line in Systems with Hot Jupiters: Evidence Against High-Eccentricity Migration", *Astrophysical Journal*, 825, 62

12. **Schlaufman, K. C.** 2015, "A Continuum of Planet Formation between 1 and 4 Earth Radii", *Astrophysical Journal Letters*, 799, L26

11. **Schlaufman, K. C.** & Casey, A. R. 2014, "The Best and Brightest Metal-poor Stars", *Astrophysical Journal*, 797, 13

10. **Schlaufman, K. C.** 2014, "Tests of in situ Formation Scenarios for Compact Multiplanet Systems", *Astrophysical Journal*, 790, 91

9. **Schlaufman, K. C.** & Winn, J. N. 2013, "Evidence for the Tidal Destruction of Hot Jupiters by Subgiant Stars", *Astrophysical Journal*, 772, 143

8. **Schlaufman, K. C.**, Rockosi, C. M., Lee, Y. S., et al. 2012, "Insight Into the Formation of the Milky Way through Cold Halo Substructure. III. Statistical Chemical Tagging in the Smooth Halo", *Astrophysical Journal*, 749, 77

7. **Schlaufman, K. C.** & Laughlin, G. 2011, "Kepler Exoplanet Candidate Host Stars Are Preferentially Metal Rich", *Astrophysical Journal*, 738, 177

6. **Schlaufman, K.C.**, Rockosi, C. M., Lee, Y. S., Beers, T. C., & Allende Prieto, C. 2011, "Insight into the Formation of the Milky Way through Cold Halo Substructure. II. The Elemental Abundances of ECHOS", *Astrophysical Journal*, 734, 49

5. **Schlaufman, K. C.**, Lin, D. N. C., & Ida, S. 2010, "A Population of Very Hot Super-Earths in Multiple-planet Systems Should be Uncovered by Kepler", *Astrophysical Journal Letters*, 724, L53

4. **Schlaufman, K. C.** & Laughlin, G. 2010, "A physically-motivated photometric calibration of M Dwarf metallicity", *Astronomy & Astrophysics*, 519, A105

3. **Schlaufman, K. C.** 2010, "Evidence of Possible Spin-orbit Misalignment Along the Line of Sight in Transiting Exoplanet Systems", *Astrophysical Journal*, 719, 602

2. **Schlaufman, K. C.**, Rockosi, C. M., Allende Prieto, C., et al. 2009, "Insight into the Formation of the Milky Way Through Cold Halo Substructure. I. The ECHOS of Milky Way Formation", *Astrophysical Journal*, 703, 2177

1. **Schlaufman, K. C.**, Lin, D. N. C., & Ida, S. 2009, "The Signature of the Ice Line and Modest Type I Migration in the Observed Exoplanet Mass-Semimajor Axis Distribution", *Astrophysical Journal*, 691, 1321

Peer-reviewed Second-author Publications

Advisee authors are underlined.

19. Schmidt, S. P., **Schlaufman, K. C.**, & Hamer, J. H. 2024, "Resonant and Ultra-short-period Planet Systems are at Opposite Ends of the Exoplanet Age Distribution", *AAS Journals*, submitted

18. Rustamkulov, Z., **Schlaufman, K. C.**, Sing, D. K., et al. 2024, "The Transit Age: Precise Exoplanet System Ages in the Era of Gaia and JWST", *AAS Journals*, submitted

17. Nataf, D. M., **Schlaufman, K. C.**, Reggiani, R., & Hahn, I. 2024, "Accurate, Precise, and Physically Self-consistent Ages and Metallicities for 400,000 Solar Neighborhood Subgiant Branch Stars", *AAS Journals*, submitted

16. Hamer, J. H. & **Schlaufman, K. C.** 2024, "Kepler-discovered Multiple-planet Systems Near Period Ratios Suggestive of Mean-motion Resonances are Young", *Astronomical Journal*, 167, 55

15. Schmidt, S. P., **Schlaufman, K. C.**, Ding, K., et al. 2023, "Verification of Gaia DR3 Single-lined Spectroscopic Binary Solutions With Three Transiting Low-mass Secondaries", *Astronomical Journal*, 166, 225

14. Reggiani, H., **Schlaufman, K. C.**, & Casey, A. R. 2023, "Iron-rich Metal-poor Stars and the Astrophysics of Thermonuclear Events Observationally Classified as Type Ia Supernovae. I. Establishing the Connection", *Astronomical Journal*, 166, 128

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