Eric Gaidos | Curriculum Vitae

Education

Massachusetts Institute of Technology — **Cambridge, Massachusetts**
Ph.D., Department of Physics, Center for Space Research — *January 1991 – June 1996*

Massachusetts Institute of Technology — **Cambridge, Massachusetts**
M.S, Department of Aeronautical and Astronautical Engineering — *September 1989 – January 1991*

California Institute of Technology — **Pasadena, California**
B.S. Applied Physics, with Honors — *October 1985 – June 1988*

Professional Appointments

University of Hawai'i at Mānoa — **Honolulu, Hawaii**
Professor, *Department of Earth Sciences* — *August 2010 – Present*

University of Hawai'i at Mānoa — **Honolulu, Hawaii**
Associate Professor, *Department of Earth Sciences* — *August 2006 – August 2010*

University of Hawai'i at Mānoa — **Honolulu, Hawaii**
Assistant Professor, *Department of Earth Sciences* — *August 2001 – August 2006*

California Institute of Technology Jet Propulsion Laboratory — **Pasadena, California**
Postdoctoral Associate, *Division of Geological and Planetary Sciences* — *May 1997 – May 2001*

Massachusetts Institute of Technology — **Cambridge, Massachusetts**
Postdoctoral Associate, *Center for Space Research* — *June 1996 – May 1997*

Recognition

Kepler Lecturer — **University of Oslo, Oslo**
Center for Earth Evolution and Dynamics — *September 2025*

Gauss Professor — **Georges-Augustus University, Göttingen**
Göttingen Academy of Sciences & Humanities — *August – November 2024*

Ida Pfeiffer Professor — **Institute for Astrophysics, University of Vienna**
Faculty of Earth Sciences, Geography & Astronomy, Univ. Vienna — *September 2016 – February 2017*

Fulbright Research Fellowship — **Institute for Astrophysics, University of Vienna**
U.S.-Austria Fulbright Commission — *September 2016 – February 2017*

Chair of Astrobiology — **Lund University**
Pufendorf Institute for Advanced Studies — *May – November 2011*

Graduate Student Fellowship — **Massachusetts Institute of Technology**
National Science Foundation — *1989 – 1992*

Dr. Robert H. Goddard Memorial Scholarship — **California Institute of Technology**
National Space Club — *1988*

Caltech – Carnation Scholarship — **California Institute of Technology**
Carnation Corporation — *1986, 1987, 1988*

Auxiliary Appointments

University of Vienna — **Vienna, Austria**
Senior Affiliate, *Institute for Astrophysics* — *2021 – Present*

University of Hawai'i at Mānoa — **Honolulu, Hawaii**
Cooperating Graduate Faculty, *Institute for Astronomy* — *2021 – Present*

University of Hawai'i at Mānoa — **Honolulu, Hawaii**
Cooperating Graduate Faculty, *Department of Oceanography* — *2002 – Present*

Instructional Portfolio

ERTH 101: Voyage of the *Vicariance*: A Geography of Time (undergrad, 3 semester-hrs)
ERTH 610: Graduate Seminar: (post-graduate, 1 semester-hour)
ERTH 616: Scientific Writing: (post-graduate, 3 semester-hours).
ERTH 669: Origins of Solar Systems (post-graduate, 3 semester-hours)
ERTH 673: Planetary Systems: A Material Perspective (post-graduate, 3 semester-hours).
ERTH 707: Exoplanet Astronomy (post-graduate, 3 semester-hours).
ERTH 710: Archaeology Meets the Earth & Space Sciences: (postgraduate, 2 semester hours).

Other Academic Appointments since Ph.D.

International Space Science Institute — **Bern, Switzerland**
Visiting Scientist — *May – June 2024*

ETH — **Zurich, Switzerland**
Visiting Professor, *Institute for Particle Physics and Astrophpysics* — *August – November 2022*

International Space Science Institute — **Bern, Switzerland**
Visiting Scientist — *June 2022*

University of Vienna — **Vienna, Austria**
Ida Pfeiffer Professor, *Institute for Astrophysics* — *March – August 2021*

University of Bern — **Bern, Switzerland**
Visiting Professor, *Center for Space and Habitability* — *September – March 2021*

University of Göttingen — **Göttingen, Germany**
Visiting Professor, *Institute for Astrophysics* — *October – December 2019*

University of Vienna — **Vienna, Austria**
Fulbright Fellow, *Institute for Astrophysics* — *September 2016 – January 2017*

International Space Science Institute — **Bern, Switzerland**

Visiting Scientist *August – September 2016*

Center for Space and Habitability **Bern, Switzerland**
Visiting Professor *May - July 2016*

Geneva Observatory **Versoix, Switzerland**
Swiss National Science Foundation Fellow *Aprril – Augusts 2015*

Harvard-Smithsonian Center for Astrophysics **Cambridge, Massachusetts**
Visiting Sabbatical Professor, *Institute for Theory and Computation* *March – August 2015*

Max Planck Institute for Astronomy, Heidelberg **Heidelberg, Germany**
Visiting Scientist *July 2014 – January 2015*

University of Lund **Lund, Sweden**
Chair of Astrobiology, *Pufendorf Institute for Advanced Studies* *May – November 2011*

University of California, Berkeley **Berkeley, California**
Visiting Sabbatical Professor, *Dept. of Earth & Planetary Sciences* *August – December 2007*

Center for Astrophysics Research of Lyon **Lyon, France**
Visiting Scientist *October 2005*

Other Professional Positions:

National Academies of Science, Engineering and Medicine **Washington, DC**
Christine Mirzayan Fellow, *Division of Earth and Life Sciences* *May 2001 – September 2001*

Paracel, Inc. **Pasadena, California**
Consultant, *bioinformatics for Celera Human Genome Sequencing Project* *1999 – 2001*

Ecole Polytechnique de Lausanne (EPFL) **Lausanne, Switzerland**
Visiting Researcher, *Department of Fluid Dynamics* *June – August 1990*

National Center for Space Research (CNES) **Toulouse, France**
Engineer, *CNES-Planetary Society Mars Balloon Project* *September 1988 – August 1989*

Extramural Research Funding (Total of $11,629,190; active in bold)

NASA *Hubble* Guest Observer Cycle 30 (PI) **$34,824**
"Photometry of a Young Planetary-Mass Companion to a Taurus M Dwarf Star" *2023–2024*

NASA *TESS* Guest Observer Cycle 4 (PI) **$50,000**
"Rotation And Multiplicity Among Hyades M Dwarfs" *2021–2022*

NASA Solar System Workings (co-PI) **$559,426**
"Planet of Steel: Carbon and the Inner Workings of Mercury's Core" *2021–2024*

NASA *Swift* Guest Observer Cycle 17 (PI) **$47,000**
"X-raying the Inner Disk of a "Dipper" Star with Swift*"* *2021–2022*

NSF Astronomy and Astrophysics Research Grants (PI) **$697,010**
"Catch a Fading Star: Using Transient Dimming to Explore Planet-Forming Zones...." *2021–2024*

NASA Interdisciplinary Consortia for Astrobiology Research (PI) **$1,734,191**
"Follow the Volatiles: Tracing chemical species relevant to habitability...." *2021–2026*

NASA *TESS* Guest Observer Cycle 4 (co-PI) **$75,000**
"Mass Measurement of TESS Transiting Candidate Companions" *2020–2021*

NASA Exoplanets Research Program (PI) **$298,807**
"Comparative Evolution of Small Planets Close to Cool Stars" *2020–2023*

NASA Exoplanets Research Program (Co-PI) **$478,549**
"Precise Near-Infrared RV Measurements of Planet Candidates Identified by TESS*"* *2019–2022*

NASA *TESS* Guest Observer Cycle 2 (PI) **$50,000**
"A survey of transient stellar dimming in TESS FFI lightcurves" *2019–2021*

NASA Astrophysics Data Analysis Program (PI) **$199,882**
"Using K2 *to explore episodic stellar variability during the epoch of planet formation"* *2019–2022*

NSF Astronomy & Astrophysics Research Grants (PI) **$293,735**
"A new spin on M dwarf ages and evolution" *2018–2022*

NSF Astronomy & Astrophysics Research Grants (co-PI) **$278,033**
"Refining the radii of exoplanet host stars" *2017–2021*

NASA *K2* Guest Observer Cycle 6 (co-PI) **$30,000**
"Solving the mystery of hot Jupiter inflation with K2*"* *2017–2021*

NASA *K2* Guest Observer Cycle 4 (co-PI) **$41,259**
"Zodiacal Exoplanets in Time (ZEIT): The Hyades Cluster" *2017–2021*

NASA *K2* Guest Observer Cycle 2 (co-PI) **$38,000**
"Giants orbiting Giants: A search for transiting planets around oscillating RGB stars" *2017–2021*

Sloan Foundation Deep Carbon Observatory, Census for Deep Life (PI) **$25,000**
"Ice-Covered Icelandic Crater Lake Ecosystem Study" *2017–2021*

NASA Origins of Solar Systems (PI) **$373,445**
"A combined Doppler and photometric search for signpost planets around M dwarfs" *2017–2021*

NASA Astrobiology: Exobiology and Evolutionary Biology (PI) **$357,0673**
"Formation, evolution, and detection of planets close to cool stars" *2017–2021*

NSF Astronomy & Astrophysics Research Grants (co-PI) **$174,022**
"Targets for planets: a database of nearby stars suitable for exoplanet surveys" *2017–2021*

NSF Graduate Student Fellowship Program (PI for student) **$75,000**
"Physical and chemical processes in the atmospheres of planetary embryos" *2017–2021*

NASA Terrestrial Planet Finder Foundation Science (PI) **$249,426**
"Observable signatures of extreme seasonality on Earth-like planets...." *2017–2021*

NASA *Newton-XMM* Telescope Observing Support (co-I) **$36,400**
"The Nature of the Flaring Companion to HD 43162" *2017–2021*

NASA Astrobiology Institute Director's Discretionary Fund (PI) **$50,000**
"Diversity, phylogeny, and genetics of the basal metazoan Trichoplax adhaerens" *2017–2021*

NASA Astrobiology Institute Cooperative Agreement Notice-3 (co-PI) **$5,171,596**
"The origin, history, and distribution of water and its relation to life in the Universe" *2003–2008*

NSF Biogeosciences (PI) **$79,000**
"Microcosm Investigations of Carbonate Reef Microbial Biogeochemistry" *2017–2021*

NSF Biocomplexity in the Environment, Coupled Biogeochem. Cycles (PI) **$98,456**
"Cycles of Carbon and Nitrogen in an Ice-covered Volcanic Crater Lake" *2001–2002*

Professional Service

Program on Exploring Planetary Systems in the Era of Time Domain Astronomy **Organizer**
Institute for Astronomy, Hawai'i *June–August 2026*

KITP Program on Rocky Planet Formation in Inner Protoplanetary Disks **Co-Organizer**
Kavli Institute for Theoretical Physics, Santa Barbara, USA *April–May 2025*

Observing techniques, instrumentation and science for metre-class telescopes III **SOC**
Tatranská Lomnica, Slovakia *11–15 September 2023*

NASA Funding Proposal Review Panels **Member**
Astrophysics Data Analysis; Medium-Class Explorers & Missions of Opportunity *Ongoing*
NASA Astrobiology Institute Cooperative Agreement Notice; Origins of Solar Systems, HST, JWST

NSF Funding Proposal Review Panels **Member**
Faculty Early Career Development Program *Ongoing*

Peer Review of Journal Manuscripts **Reviewer**
The Astrophysical Journal; The Astronomical Journal; Monthly Notices of the Royal *Ongoing*
Astronomical Society; Icarus; Journal of Geophysical Research - Planets

NASA *TESS* Mission, Atmospheres Working Group **Member**
2014–2021

***TESS* Science Meeting I** **SOC**
Cambridge, USA *July 2019*

Exoplanet Science Working Group, Origins Space Telescope Project **Member**
2017–2019

International Science Definition Team for Exoplanets, Thirty Meter Telescope **Member**
2014–2025

Session on "M Dwarfs in the Light of Exoplanets" at Cool Stars 17 **Organizer**
Barcelona, Spain *October 2012*

Workshop: Transiting Planets in the House of the Sun: M Dwarfs and their Planets **Organizer**
Kula, Maui, USA *June 2012*

Session on "Geology of Exoplanets" at *Exoplanets for Planetary Scientists* Conference **Chair**
Orlando, USA *December 2010*

Potsdam, Germany **Participant**
IODP Working Group on "Limits and Evolution on Earth and Beyond" *2009*

Session on 'Hot Earths: formation, detection, and structure" at AAS 210th Meeting **Organizer**
Honolulu, USA *May 2007*

NASA-JPL Terrestrial Planet Finder Mission **Science Working Group**
2002–2006

ISSI Workshop:"Geology and Habitability of Terrestrial Planets" **SOC**
Bern, Switzerland *September 2005*

2nd Terrestrial Planet Finder /Darwin Meeting **SOC**
San Diego, USA *July 2004*

Bioastronomy Meeting **SOC**
Reykjavik, Iceland *July 2004*

Supervision and Mentoring

Postdocs:

Knicole Colón, Postdoctoral Researcher in Astronomy **Supervisor**
Current position: Staff Scientist, NASA Goddard Space Flight Center *2012-2013*

Joost van Summeren, Postdoctoral Researcher in Geology & Geophysics **Supervisor**
Current position: KWR Research Institute *2011–2012*

Eric Hilton, Postdoctoral Researcher in Astronomy **Supervisor**
Current position: Universe Sandbox *2011–2012*

Antje Rusch. Postdoctoral Researcher in Geomicrobiology **Supervisor**
Current position: Fauna Marin GmbH *2006–2008*

Evgenya Shkolnik, NASA Postdoctoral Research Fellow **Supervisor**
Current position: Professor, Arizona State University *2005–2006*

Ketil Sorenson, Postdoctoral Researcher in Geomicrobiology **Supervisor**
Current position: Technical University of Denmark *2004–2006*

Doctoral Students:

Lukas Gehrig, Institute for Astrophysics, University of Vienna **Co-Advisor**
Dissertation: "Modeling the Interaction of Young Low-Mass Stars with Their Disks" *2021–2024*

Ryan Dungee, Institute for Astronomy Doctoral Student **Co-Advisor/Supervisor**
Dissertation: "Understanding the evolution of M Dwarf spin-down" *2019–2022*
Current Position: Dunlap Postdoctoral Fellow, Dunlap Institute, University of Toronto

Andrew Mann, Institute for Astronomy Doctoral Student **Advisor/Supervisor**
Dissertation: "Planets around cool stars: spectroscopic/photometric study of M dwarfs" *2009–2013*
Current Position: Assistant Professor, University of North Carolina

Nicholas Moskovitz, Institute for Astronomy Doctoral Student **Advisor/Supervisor**
Dissertation: "Spectroscopic and theoretical constraints on planetesimal differentiation" *2005–2009*
Current Position: Staff Scientist, Lowell Observatory

Angelos Hannides, Dept. of Oceanography Doctoral Student **Co-Advisor/Supervisor**
Dissertation: "Organic matter cycling and nutrient dynamics in marine sediments" *2002–2008*
Current Position: Assistant Professor, Coastal Carolina University

Doctoral Dissertation Committees:

Daniel Steiner (University of Vienna) **Reader**
"Large-scale magnetic fields in protoplanetary disks" *2024–present*

Keng-Hsien (Earth & Planetary Sciences) **Committee Member**
"Deep volatile cycle in planetary interiors" *2021–2023*

Jingwen Zhang (Institute for Astronomy) **Committee Member**
"Orbital Dynamics in Close Binaries & Fourier Transform Spectr. for Direct Imaging" *2021–2022*

Nicholas Saunders (Institute for Astronomy) **Committee Member**
"Tracing Hot Jupiter Evolution with TESS *and* Gaia*"* *2021–2022*

Casey Brinkman (Institute for Astronomy) **Committee Member**
"Diversity of rocky planet compositions and host star abundances" *2019–2022*

Ashley Chontos (Institute for Astronomy) **Committee Member**
"Exoplanets orbiting asteroseismic stars: benchmark systems with TESS*"* *2019–2021*

Travis Berger (Institute for Astronomy) **University Representative**
"Precise demographics of Kepler *exoplanets in the* Gaia *era"* *2018–2021*

Samuel Grunblatt (Institute for Astronomy) **University Representative**
"Giant planets transiting giant stars" *2016–2019*

Megan Ansdell (Institute for Astronomy) **University Representative**
"Protoplanetary disk demographics with ALMA" *2014–2017*

Brendan Bowler (Institute for Astronomy) **University Representative**
"A high-contrast direct imaging search for gas-giant planets around low-mass stars" *2010–2013*

Dagny Looper (Institute for Astronomy) **University Representative**
"TW Hydrae Association: new nearby accreting stars and first estimate of the IMF" *2008–2011*

Masters Students:

Ian Berry (Institute for Astronomy) **Co-Advisor**
M.S. Project: "Extending Gyrochronology to the Fully Convective Boundary and Beyond..." *2023–2024*

Andrew Hoffman (Institute for Astronomy) **Advisor/Supervisor**
M.S. Project: "Multi-wavelength Photometry of Occulting Dust around Taurus Stars" *2022–2023*

Alexa Anderson (Institute for Astronomy) **Advisor/Supervisor**
M.S. Project: "The Dynamic Inner Disk of EP Chamaeleontis" *2021–2022*

Aleezah Ali (Institute for Astronomy) **Advisor/Supervisor**
M.S. Project: "Binarity of Kepler *M Dwarf Stars and Their Planets"* *2021–2022*

Leander Schlarmann (University of Vienna) **Co-Advisor**
M.S. Project: "Modeling Venus-like atmospheres in chemical equilibrium" *2021–2022*

Carina Heinrichsberger (University of Vienna) **Co-Advisor**
M.S. Project: "Why is Venus so Cool" *2021–2022*

Suchitra Narayanan (Institute for Astronomy) **Advisor/Supervisor**
M.S. Project: "SURPH: A Relative Photometry Pipeline for LCO" *2020–2021*

Rena Lee (Department of Earth Sciences) **Advisor/Supervisor**
M.S. Thesis: "Multiplicity in the Beta Pictoris Moving Group" *2020–2022*

Larisa Nofi (Institute for Astronomy) **Advisor/Supervisor**
M.S. project: "Spectrothermometry of K dwarf stars" *2015–2016*
Current position: Lockheed-Martin Aerospace

Samuel Grunblatt (Institute for Astronomy) **Advisor/Supervisor**
M.S. project: "Giant planets around giant stars" *2015–2016*
Current position: Kalbfleisch Postdoctoral Fellow, American Museum of Natural History

Megan Ansdell (Institute for Astronomy) **Advisor/Supervisor**
M.S. project: "The near-ultraviolet luminosity function of M dwarf stars" *2013–2014*
Current position: Program Scientist, NASA Headquarters

Jillian Ward (Department of Oceanography) **Advisor/Supervisor**
M.S. thesis: "Diversity and Biogeography of the Unique, Tropical Phylum Placozoa" *2005–2008*
Current position: biotechnology industry

Bachelors Students:

Lynzee Hoegger (Department of Physics & Astronomy) **Advisor**
B.A. Senior Project: "LCO Observations of a T Tauri Dipper Star" *2021–2022*

John Bredall (Department of Physics & Astronomy) **Co-Advisor**
B.S. Honors Thesis: "An ASAS-SN Survey of Variable Young Stellar Objects" *2019–2020*

Oana Vesa (Albion College) **Co-Advisor**
NSF Research Experience for Undergraduates at the Institute for Astronomy *2017*

Emily Chang (Global Environmental Sciences, Department of Oceanography) **Advisor**
B.S. Thesis: "Identification & Photometry of Candidate Transiting Exoplanet Signals" *2011–2012*

Jennifer Beyer (Department of Geology & Geophysics) **Advisor**
NASA Space Grant Undergraduate Fellow *2010–2011*

Melissa Ilardo (Princeton University) **Advisor**
Visiting Summer Student *2007–2008*

Nelson Lazago (Department of Biology) **Advisor**
NASA Space Grant Undergraduate Fellow *2007–2008*

Daniel Rogers (University of Massachusetts at Amherst) **Advisor**
Visiting Student *2006–2007*

Whitney Hassett (Global Environmental Sciences, Dept. of Oceanography) **Supervisor**
Student assistant *2006–2007*

Sean Otaga (Departments of Civil Engineering and Oceanography) **Supervisor**

Student assistant *2006–2007*

Aliz Axmann (Department of Mathematics) **Advisor**
B.S. thesis: "Dynamics of Motility in Placazoa" *2004–2005*

Maxime Grand (Global Environmental Sciences, Dept. of Oceanography) **Advisor**
B.S. thesis: "Precipitation, Plant Communities and Methane Fluxes in Ka'au Crater" *2002–2003*