

JENNIFER SOBECK

CONTACT

Location | Pasadena, CA
Affil. | Caltech/IPAC

Email | jsobeck@caltech.edu
Website | <https://jsobeck.github.io>
Github | <https://github.com/jsobeck>
ORCID | 0000-0002-4989-0353

INTEREST SUMMARY

I am a stellar spectroscopist with an atomic and molecular physics background. My scientific interests lie in the chemodynamical characterization of stellar populations across a range of environments.

In general, I want to apply my varied expertise to large astronomical surveys and work in a collaborative research environment.

EDUCATION

PhD in Physics – University of Texas at Austin 2007

An Atomic Physics Viewpoint of Stellar Abundance Analysis

MA in Physics – University of Texas at Austin 2003

Gas Phase Enthalpy Difference Between the Two Conformers of n-Butane

BS in Physics – University of Texas at Austin

RESEARCH POSITIONS

MSOS Team Lead Oct 2025 – Present

Microlensing Science Operations System, Roman Science Support Center at Caltech/IPAC

Lead Systems Scientist Oct 2023 – Present

Roman Science Support Center at Caltech/IPAC

Associate Scientist Oct 2023 – Present

IPAC, California Institute of Technology

MSE System Scientist Feb 2021 – Oct 2023

Maunakea Spectroscopic Explorer, Canada France Hawaii Telescope

SDSS-IV Project Manager for APOGEE-2 & LCO Operations Nov 2018 – Feb 2021

Sloan Digital Sky Survey IV

Senior Research Scientist Mar 2017 – Feb 2021

Department of Astronomy, University of Washington

APOGEE-2 Project Manager/Deputy Project Manager Oct 2013 – Nov 2018

Sloan Digital Sky Survey IV

Senior Scientist/Research Associate Oct 2013 – Mar 2017

Department of Astronomy, University of Virginia

External Postdoctoral Scholar Jan 2012 – Dec 2013

Department of Astronomy and Astrophysics, University of Chicago

CNRS Postdoctoral Scholar Dec 2011 – Jan 2013

Laboratoire Lagrange, Observatoire de la Cote d'Azur

Kavli Institute for Cosmological Physics Associate Fellow Jun 2010 – Dec 2012

Department of Astronomy and Astrophysics, University of Chicago

JINA Postdoctoral Scholar Oct 2008 – Dec 2011

Joint Institute for Nuclear Astrophysics

Department of Astronomy and Astrophysics, University of Chicago

DGDF Postdoctoral Fellow 2007, 2008

European Southern Observatory, Garching, Germany

TEACHING POSITIONS

Assistant Instructor 2020, 2022, 2023

Software Carpentry

Guest Lecturer 2018, 2019

Department of Astronomy, University of Washington

Assistant Instructor 2003 – 2005

Dept. Astronomy & Dept. Physics, University of Texas at Austin

Teaching Assistant 2000 – 2003

Department of Physics, University of Texas at Austin

PUBLICATIONS	<p><i>Overview:</i></p> <p>I currently have 214 Astronomy- and Physics-related publications (103 Refereed; 111 Non-Refereed), which have received over 25,000 citations (h-index: 67). NASA ADS Author Query (Link)</p> <p><i>Selected Relevant Publications:</i></p> <p>[1] Baril, M. R., Sheinis, A. I., Sobeck, J., Frinchaboy, P., Epinat, B., & Ho, K. K., 2024, SPIE Proc., 13096, 130969P9 [doi:10.1117/12.3018448] <i>"Conceptual Design of an Integral Field Unit for the Canada France Hawaii Telescope"</i></p> <p>[2] Sheinis, A., Barden, S.C., & Sobeck, J., 2023, AN, 344, e20230108 [doi:10.1002/asna.20230108] <i>"The Maunakea Spectroscopic Explorer: Thousands of fibers, infinite possibilities"</i></p> <p>[3] Marshall, J. L., Sobeck, J., Petric, A. O., & Flagey, N., 2022, SPIE Proc., 12186, 1218609 [doi:10.1117/12.2629973] <i>"Planning Scientific Operations for the Maunakea Spectroscopic Explorer"</i></p>	
TALKS AND PRESENTATIONS	<p><i>Overview:</i></p> <p>I have given more than 50 presentations on a variety of subjects (science, survey planning/management, teaching, instrumentation, software/coding, and outreach) in multiple forums over my career.</p>	
COMMITTEES	<p>Roman Core Community Survey Definition Committee: Galactic Bulge Time Domain Survey</p> <p>Habitable Worlds Observatory Stars & Stellar Populations Working Group Steering Committee</p> <p>Rubin LSST Survey Cadence Optimization Committee Milky Way Observing Strategy Task Force</p> <p>Rubin LSST Stars, Milky Way & Local Volume (SMWLV) MC Working Group, Co-Chair</p>	
REVIEW PANELS	<p>NSF AAG Proposal Review Panelist</p> <p>NSF AAPF Proposal Review Panelist</p> <p>NSF CAREER Review Panelist</p> <p>NASA APRA-SAT Proposal Review Panelist and Panel Chair</p>	
SERVICE	<p>STScI HST Proposal Review Panelist and Vice Chair</p> <p>NOIRLab Gemini Large Program Review Panelist</p> <p>Astrophysical Journal Referee</p> <p>Astrophysical Journal Letters Referee</p> <p>Astronomy & Astrophysics Referee</p> <p>Journal of Physics B: Atomic, Molecular & Optical Physics Referee</p> <p>Monthly Notices of the Royal Astronomical Society Referee</p> <p>United States Congressional Visits Day, Science, Engineering, & Technology</p>	
GRANTS AND AWARDS	<p>SDSS-IV Architect</p> <p>e-Science Institute Incubator Project (PI)</p> <p>NSF Astronomy and Astrophysics Research Grants (Collab/Co-I) AST 0607708, 0907732, 1715898</p> <p>Sloan Foundation Grant (Collaborator/Co-I)</p> <p>University of Virginia Center for Global Inquiry & Innovation Grant (Co-I)</p> <p>STScI Hubble Space Telescope Approved GO/AR Program Grants (Co-I)</p>	<p>2020</p> <p>2018</p> <p></p> <p>2013, 2015</p> <p>2015</p> <p>Cycles 18, 19, 20, 23</p>
SKILLS	<p>PROGRAMMING</p> <p>SOFTWARE</p> <p>LANGUAGES</p>	<p><i>Proficient:</i> Python, IDL, Fortran</p> <p><i>Familiar:</i> R, Matlab, Mathematica, C++</p> <p><i>Proficient:</i> $\text{\LaTeX}$, Unix, Git</p> <p><i>Familiar:</i> SQL, Solidworks</p> <p>English (<i>fluent</i>), French (<i>proficient</i>)</p>