

UNA GAYLIN SCHNECK

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CURRENT AFFILIATION

Department of Earth, Atmospheric, and Planetary Science; MIT

EDUCATION

-Ph.D. Candidate in Planetary Science [expected 5/25]

Department of Earth, Atmospheric, and Planetary Science; MIT

[Advisor: J. T. Perron]

-B.S. Honors in Geophysics (with specialization in Space Physics) [June 2018]

Department of Earth, Planetary, and Space Physics; UCLA

-B.S. Honors Thesis: *Stopping a Charging Elephant: The Formation and Fate of Interplanetary Magnetic Field Enhancements*

[Advisor: C. T. Russell]

AWARDS

2020 National Science Foundation (NSF) Graduate Research Fellowship

2020 Dean of Science Fellow at MIT

2018 Earth, Planetary, and Space Sciences UCLA Valedictorian

2018 Eugene B. Waggoner Undergraduate Scholarship

PUBLICATIONS

***h*-index: 3 | *i10*-index: 3 | CITATIONS: 205 (GOOGLE SCHOLAR)**

Refereed Publications:

2019

3. Pinchuk, P., Margot, J., Greenberg, A. H., Ayalde, T., Bloxham, C., Boddu, A., Gerardo, L., Cliffe, M., Gallagher, S., Hart, K., Hesford, B., Mizrahi, I., Pike, R., Rodger, D., Sayki, B., **Schneck, U. G.**, Tan, A., Xiao, Y., and Lynch, R. S., 2019. “A Search for Technosignatures from TRAPPIST-1, LHS 1140, and 10 Planetary Systems in the Kepler Field with the Green Bank Telescope at 1.15–1.73 GHz” *The Astronomical Journal*. 157 (122).

2017

2. Howard, T. A., DeForest, C. E., **Schneck, U. G.**, and Alden, C. R., 2017. “Challenging Some Contemporary Views of Coronal Mass Ejections. II: The Case for Absent Filaments” *The Astrophysical Journal*. 834 (86)

2013

1. Yu, H. C., Sloan, J.L., Scharer, G., Brebner, A., Quintana, A.M., Achilly, N.P., Manoli, I., Coughlin, C.R., Geiger, E.A., **Schneck, U. G.**, Watkins, D., Suormala, T., Van Hove, J.L., Fowler, B., Baumgartner, M.R., Rosenblatt, D.S., Venditti, C.P., and Shaikh, T.H., 2013. An X-Linked Cobalamin Disorder Caused by Mutations in

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Transcriptional Coregulator HCFC1. *The American Journal of Human Genetics*. 93 (3): 506-514

PRESENTATIONS

* = invited talk

2023

- “A Bayesian Approach to the Interior Sounding of Callisto”, American Geophysical Union (AGU), *Ice and Ocean Worlds: Geology, Oceanography, Chemistry, and Habitability*
- * “Modelling Wave Action on the Shores of Titan’s Lakes”, Brown University, Department of Earth, Environmental, and Planetary Sciences; Planetary Lunch Bunch

2022

- “Sediment Entrainment by Waves and Tides on Titan”, American Geophysical Union (AGU), *Tangerine Dreams: Titan’s Diverse Enviroments*

2020

- * “New Insights on Flux Transfer at the Magnetopause”, UCLA, Department of Earth, Planetary, and Space Sciences; *EPSS Space Physics Seminar*

2019

- * “Something New Under the Sun (or at least in the solar wind): The Effect of Dust on the IMF and Earth”, UCLA, Department of Earth, Planetary, and Space Sciences, Los Angeles, CA; *EPSS Space Physics Seminar*

2016

- “Testing the urKREEP Hypothesis with Eucrites”, UCLA, Department of Earth, Planetary, and Space Sciences, Los Angeles, CA; *9th Annual Los Angeles Basin Earth and Planetary Sciences Student Research Symposium*

2015

- “Eruptive Prominences Evolution at Great Distances from the Sun”, Laboratory for Atmospheric and Space Physics (LASP), Boulder, CO; *LASP REU*

PROFESSIONAL SERVICES

JOURNAL REVIEWS

- Geophysical Research Letters

OUTREACH

- Letters to a Pre-Scientist (LPS) 2021-2022
- SPLASH 2021: “The Search for Extraterrestrial Life”
- STEM Week (Boston 826) 2021: “The Astrobiological Potential of Icy Satellites”

CURRICULUM

- MinSight: A pet model for the Heat Flow and Physical Properties Probe (HP3) instrument on the InSight mission to Mars for classroom demonstrations (Advisor: J.

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Aurnou). Taught in UCLA's EPSS Class (171) Advanced Computing in Geosciences
2019/2020

PUBLIC PYTHON PACKAGES

- **PYDAR**: Access, download, view, and manipulate Cassini RADAR data from the image flybys on Saturn's moon Titan
- **CENTERLINE-WIDTH**: Find the centerline and width of rivers based on the latitude and longitude from a right and left bank

PROFESSIONAL APPOINTMENTS

8. MIT, Department of Earth, Atmospheric, and Planetary Science, Cambridge, MA
 - PhD Candidate: *Sept. 2020-Present*
 - Advisor: J. Taylor Perron
 7. UCLA, Department of Earth, Planetary, and Space Sciences, Los Angeles, CA
 - Research Associate I: *Sept. 2018-Sept. 2020*
 - Advisor: Christopher T. Russell
 6. NASA Johnson Space Center, Jacobs Technology, Houston, TX
 - Planetary Geochemistry Intern: June 2017-Sept. 2017
 - Advisor: Jeremy W. Boyce
 5. UCLA, Department of Earth, Planetary, and Space Sciences, Los Angeles, CA
 - Student Researcher: *Sept. 2016-Dec.2017*
 - Advisor: John Wasson
 4. UCLA, Department of Earth, Planetary, and Space Sciences, Los Angeles, CA
 - Undergraduate Researcher (*Sept. 2015-May 2016*)
 - Advisor: Jeremy W. Boyce
 3. Southwest Research Institute (Solar Physics), Boulder, CO
 - Student Researcher: *June 2016-Sept. 2016*
 - Advisor: Timothy A. Howard
 2. Southwest Research Institute (Solar Physics), Boulder, CO
 - Undergraduate Researcher (REU): *June 2015-Sept 2015*
 - Advisor: Timothy A. Howard
 1. University of Colorado, Anschutz Medical, Department of Human Genetics, Denver, CO
 - Researcher Assistant (*May 2012-Sept.2012*)
 - Advisor: Tamim H. Shaikh
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LETTERS OF RECCOMENDATION AVAILABLE UPON REQUEST

LAST UPDATED: JANUARY 2024