

# 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 05/25]

Department of Earth, Atmospheric, and Planetary Science; MIT

[Advisor: J. T. Perron]

**-B.S. Honors in Geophysics (with specialization in Space Physics)** [06/2018]

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: 210 | ORCID: 0000-0003-0048-5143**

### 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

## SCHNECK CURRICULUM VITAE

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

### PRESENTATIONS

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\* = invited talk

#### 2024

- “Confirmation of a Callisto Subsurface Ocean Using Bayesian Inference”, Lunar and Planetary Science Conference (LPSC), *Icy Moons: From Surfaces to Interiors and the Lab*

#### 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 Environments*

#### 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; *9<sup>th</sup> 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

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#### 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”

## SCHNECK CURRICULUM VITAE

### *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. 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**

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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**

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LAST UPDATED: MARCH 2024