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TRENT B. THOMAS

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Department of Earth and Space Sciences, University of Washington

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EDUCATION

- 2020-** **Dual-title Ph.D.**, Earth and Space Sciences, Astrobiology, University of Washington, Seattle
2020 **B.S.**, Astrophysics, University of California, Los Angeles

PROFESSIONAL APPOINTMENTS

- 2020-** **Research Assistant**, University of Washington, Seattle
Advisor: Professor David Catling
- 2018-** **Research Intern**, Jet Propulsion Laboratory, NASA
Advisor: Dr. Renyu Hu

GRANTS AND FELLOWSHIPS

- 2020** National Science Foundation Graduate Research Fellowship

AWARDS AND HONORS

- 2022** Career Development Award, Lunar and Planetary Institute (LPI)
- 2020** Dean's Prize for Excellence in Undergraduate Research, UCLA
- 2020** Phi Beta Kappa Honor Society
- 2019** Early Career Collaboration Award, NASA Astrobiology Institute
- 2019** Rudnick-Abelmann Scholarship, UCLA Department of Physics and Astronomy

PUBLICATIONS

Renyu Hu and **Trent B. Thomas** (2022), *A Nitrogen-Rich Atmosphere on Ancient Mars Consistent with Isotopic Evolution Models*, Nature Geoscience, DOI: <https://doi.org/10.1038/s41561-021-00886-y>

Trent B. Thomas, Renyu Hu, and Daniel Y. Lo, *Joint Models for the Evolutionary History of Carbon, Nitrogen, and Argon in the Martian Atmosphere*. [in preparation]

Trent B. Thomas and David C. Catling, *A Self-Consistent Model for Generating Marinoan Cap Carbonates and Constraining Neoproterozoic Climate*. [in preparation]

CONFERENCE ACTIVITY

Trent B. Thomas (2022), *A Self-Consistent Model for Generating Marinoan Cap Carbonates and Constraining Neoproterozoic Climate*, AbSciCon, Atlanta, GA. [Oral Presentation]

Trent B. Thomas (2022), *A Self-Consistent Model for Generating Marinoan Cap Carbonates and Constraining Neoproterozoic Climate*, UW ESS Research Gala, Seattle, WA. [Oral Presentation]

Trent B. Thomas (2022), *Joint Models for the Evolutionary History of Carbon, Nitrogen, and Argon in the Martian Atmosphere*, LPSC 53rd Meeting, The Woodlands, TX. [Oral Presentation]

Trent B. Thomas (2020), *A Nitrogen-Rich Atmosphere on Ancient Mars Indicated by Isotopic Evolution*,

AGU Fall Meeting, virtual. [**Oral Presentation**]

Trent B. Thomas (2020), *A Nitrogen-Rich Atmosphere on Ancient Mars Indicated by Isotopic Evolution*, DPS 52nd Meeting, virtual. [**Oral Presentation**]

Trent B. Thomas (2020), *A Nitrogen-Rich Atmosphere on Ancient Mars Indicated by Isotopic Evolution*, UCLA Undergraduate Research Week, virtual. [**Oral Presentation**]

Trent B. Thomas (2019), *Evolutionary History of the Isotopic Composition of Nitrogen in the Martian Atmosphere*, 9th International Conference on Mars, Pasadena, CA. [**Poster Presentation**]

INVITED TALKS

- 2022 Jet Propulsion Laboratory, High Performance Computing User Group Meeting
- 2022 NASA Goddard Institute for Space Science, ROCKE-3D GCM Journal Club
- 2020 California Institute of Technology, Mars Atmosphere Journal Club

ADDITIONAL TRAINING

- 2022 Planetary Exploration Mission Design Workshop, UW Astrobiology, virtual.
- 2021 VPlanet Developers Workshop, University of Washington, virtual.
- 2021 ROCKE-3D GCM Tutorial, NASA GISS, virtual.
- 2020 Quantitative Habitability Workshop, NExSS, virtual.
- 2019 Exoclines Simulation Platform Summer School, University of Bern, Switzerland.

OUTREACH

- 2022 Guest speaker, Delran School System K-12 STEM Family Engagement Night
- 2021- Social media manager, UW Astrobiology
- 2021 Organizer/Moderator/Panelist, UW Astrobiology Public Science Panel Series
- 2019-20 Volunteer guide, UCLA Planetarium
- 2019 Volunteer scientist, K-12 outreach event: Exploring Your Universe, UCLA

SERVICE

- 2022 Departmental awards committee graduate representative, UW Earth and Space Sciences
- 2021-22 Graduate-nominated colloquium speaker committee, UW Earth and Space Sciences
- 2021-22 Computing committee graduate representative, UW Earth and Space Sciences