

Kevin T. Trinh

PhD Candidate in Planetary Science

(updated May 5th, 2023)

CONTACT INFO Arizona State University kttrinh1@asu.edu
School of Earth and Space Exploration (763) 355-7584
781 Terrace Mall <https://ktrinh20.github.io>
Tempe, AZ 85287-6004

RESEARCH INTERESTS Icy satellites; planetary formation and evolution; geodynamics; rock-water geochemistry

EDUCATION

2020 – now **Ph.D. in Geological Sciences**, Arizona State University
Advisor: Joseph G. O'Rourke

2015 – 2019 **B.A. in Physics**, Bowdoin College

EXPERIENCE

2020 – now Graduate Research Associate, Arizona State University
2019 – 2020 Co-Founder, Meme Party LLC (tech start-up, 1000+ mobile app downloads)
2019 – 2020 Radar Systems Analyst, Dynetics Inc.
2018 Research Assistant, Brown University (Advisors: Colleen Dalton & Zhitu Ma)
2017 Research Assistant, Brown University (Advisors: Christian Huber & Tarsilo Girona)
2017 Teaching Assistant, Bowdoin College

ACADEMIC AWARDS

2021, 2022 Ninger Student Travel Award (\$2,000)
2021 American Geophysical Union – Sharing Science Grant (\$500)
2021 NASA – Future Investigator in NASA Earth and Space Science Technology (\$150,000)
2019 National Science Foundation – Graduate Research Fellowship (\$147,000 declined)

MISSION INVOLVEMENT

2023 – now NASA Europa Clipper, Affiliate
2023 NASA Jet Propulsion Laboratory—Planetary Science Summer School (PSSS)

REFEREED PAPERS

2. CJ Bierson, JJ Fortney, **KT Trinh**, and M Kreslavsky (in revision). Jupiter's Early Luminosity May Have Driven Off Io's Initial Water Inventory. *Planetary Science Journal*.

1. **KT Trinh**, CJ Bierson, JG O'Rourke (in press). Slow Evolution of Europa: Metamorphic Ocean Origin, Delayed Metallic Core Formation, and Limited Seafloor Volcanism. *Science Advances*.

CONFERENCE ABSTRACTS

8. **KT Trinh**, CJ Bierson, JG O'Rourke (2022). Slow Evolution of Europa: Metamorphic Ocean Origin, Delayed Metallic Core Formation, and Limited Seafloor Volcanism. AGU, oral.

7. **KT Trinh**, CJ Bierson, JG O'Rourke (2022). Europa's metallic core may have taken billions of years to start forming. LPSC, oral.

6. **KT Trinh**, CJ Bierson, JG O'Rourke (2022). Europa's metallic core may have taken billions of years to start forming. AGU, oral.

5. **KT Trinh**, CJ Bierson, JG O'Rourke (2021). The Argument for a Young Metallic Core at Europa. Lunar Grad Conference, oral.
4. **KT Trinh**, CJ Bierson, JG O'Rourke (2021). Delayed Timing of Metal-Silicate Differentiation in Europa. LPSC, poster.
3. **KT Trinh**, Z Ma, CA Dalton (2018). Measuring Rayleigh Wave Phase Velocity in the Antarctica Upper Mantle from Ambient Seismic Noise. AGU, poster.
2. LA Blackstone, T Girona, C Huber, **KT Trinh** (2018). Periodic Outgassing Preceding Volcanic Eruptions: Preliminary Results on Turrialba Volcano, Costa Rica. AGU, poster.
1. T Girona, C Huber, **KT Trinh**, M Protti, and JF Pacheco (2017). Using Digital Cameras to Detect Warning Signs of Volcanic Eruptions. AGU, poster.

SEMINAR TALKS

- 2021 – 2023 Arizona State University, Geophysics Seminar Series (3x)
 2022 NASA/Caltech Jet Propulsion Laboratory, Icy Collaboration and Exchange (invited)
 2022 Network for Ocean Worlds – Lightning Talk

SERVICE

- 2023 – now Co-chair, ASU Geophysics Seminar Series
 2022 – now Grad student rep, ASU SESE Faculty Search Committee
 2022 – now Mentor for junior/senior undergraduates, GEM Program
 2022 – now Mentor for first-year graduate students, ASU SESE
 2022 – now Mentor to first-year undergraduates, Sundial at ASU
 2021 – now Volunteer, ASU SESE Prison Education Program
 2020 – now Symposium moderator, Leadership Alliance SR-EIP
 2023 SESE Open House, Q&A Panelist
 2021 Science communicator, @whyshouldyoucarescience (Instagram)
 2021 Science communicator, Skype-a-Scientist
 2021 Pen Pal, Letters to a Pre-Scientist
 2016 – 2019 President/Treasurer, Society of Physics Students at Bowdoin College
 2018 – 2019 Mentor to first-year undergraduates, Bowdoin Science Experience

STUDENTS MENTORED

- 2023 Eyan Weissbluth (general first-year undergraduate mentorships)
 2022 – 2023 Valerie Allerio (graduate admissions, accepted into physics PhD program at CU Boulder)
 2022 Hayden Ferrell (general first-year undergraduate mentorship)

COMPUTER SKILLS

- Advanced: MATLAB, Python
 Intermediate: C++, JavaScript, HTML/CSS, parallel computing, EQ3/6
 Basic: Java, LaTeX, R, shell-scripting, mobile/web development, Git, Adobe Illustrator