

Jianhua (Ginny) Gong

gongjian@iu.edu

Institute of Geophysics and Planetary Physics
Scripps Institution of Oceanography, UC San Diego
9500 Gilman Drive, La Jolla, CA 92093

EDUCATION

- 2015–2021 **Ph.D.**, Geophysics
MIT/WHOI Joint Program, Massachusetts, US
Co-advisors: Dr. Jeffrey J. McGuire and Dr. Dan Lizarralde
Thesis: Structure and Mechanics of the Subducted Gorda Plate: Constrained by Afterslip Simulations and Scattered Seismic Waves
- 2012–2015 **M.Sc.**, Geophysics
Peking University, Beijing, China
Advisor: Dr. Zengxi Ge
Thesis: Imaging Mantle Transition Zone with SS Precursor
- 2008–2012 **B.Sc.**, Geophysics
Peking University, Beijing, China

PROFESSIONAL EMPLOYMENT

- Starting 2023 **Assistant Professor**
Department of Earth and Atmospheric Sciences, Indiana University, Bloomington
- 2021–2022 **Postdoctoral Scholar**
Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA
Mentor: Dr. Wenyan Fan

PUBLICATIONS

- [6] **Gong, J.**, and J. J. McGuire. “Waveform signatures of earthquakes located close to the subducted Gorda plate interface”, *Bulletin of the Seismological Society of America*, (2022), doi: <https://doi.org/10.1785/0120210261>.
- [5] **Gong, J.**, W. Fan, and R. Parnell-Turner. “Microseismicity indicates atypical small-scale plate rotation at the Quebrada transform fault system, East Pacific Rise”, *Geophysical Research Letters*, (2022), doi: 10.1029/2021GL097000.
- [4] **Gong, J.**, and J. J. McGuire. “Constraints on the geometry of the subducted Gorda plate from converted phases generated by local earthquake”, *Journal of Geophysical Research: Solid Earth*, (2020), e2020JB019962.
- [3] Shinevar, W., H. Mark, F. Clerc, E. A. Codillo, **J. Gong**, J. Olive, S. M. Brown, P. T. Smalls, Y. Liao, V. Le Roux, and M. D. Behn. “Causes of oceanic crustal thickness oscillations along a 100-Myr Mid-Atlantic Ridge flow line”, *Geochemistry, Geophysics, Geosystems*, 20 (2019): 6123-6139.
- [2] **Gong, J.**, and J. J. McGuire. “Interactions between strike-slip earthquakes and the subduction interface near the Mendocino Triple Junction”, *Earth and Planetary Science Letters*, 482 (2018):414-422.

[1] **Gong, J.**, and Z. Ge. “Finite-frequency effects of SS precursor”, *Acta Scientiarum Naturalium Universitatis Pekinensis*, 2016, 52(6): 1014-1024.

Submitted **Gong, J.**, and W. Fan. “Seismicity, fault architecture, and slip mode of the westernmost Gofar transform fault”.

Liu, T., **J. Gong**, and W. Fan. “In-situ Vp/Vs ratio reveals fault-zone material variation at the westernmost Gofar transform fault, East Pacific Rise”.

Fan, W., P. M. Shearer, D. T. Trugman, R. S. Matoza, J. Buehler, N. Mancinelli, W. Wang, S. S. Wei, X. Chen, G. Lin, T. Liu, and **J. Gong**. “Event Filing System (EFS): A binary seismic data format for fast I/O on demand on multiple platform”.

INVITED TALKS

04/2022 **Gong, J.** “Microseismicity and fault slip at ultra fast slipping oceanic transform fault”. Marine Geology and Geophysics Seminar. Graduate School of Oceanography, University of Rhode Island.

12/2021 **Gong, J.**, W. Fan, M. S. Boettcher, J. J. McGuire, J. A. Collins, J. M. Warren, M. D. Behn, E. C. Roland, C. R. German, Y. Liu, and T. A. Morrow. “Using microearthquakes to investigate the earthquake preparation process at the Gofar Transform Fault, East Pacific Rise”. AGU Fall Meeting.

03/2021 **Gong, J.**, and J. J. McGuire. “Constraints on the geometry of the subducted Gorda plate from converted phases generated by local earthquakes”. SSA Cutting-edge Methods and Applications in Seismic Tomography.

FIELD EXPERIENCE

11/2019–12/2019 **R/V Atlantis, AT42**: OBS deployment and rock dredging for the Gofar Transform Fault Earthquake Prediction Experiment.

10/2019–12/2019 **Nodal array experiment** in northern California to image the Cascadia locked zone.

09/2019 **R/V Armstrong, AR38**: Student Lead Cruise. Capturing shelf-break front dynamics and interaction with warm core ring; phytoplankton, zooplankton and nutrient sampling.

07/2016 **R/V Sikuliaq**: Borehole tiltmeter deployment offshore Vancouver Island.

12/2014–01/2015 **R/V Dayangyihao, DY34**: Geological survey near mid-ocean ridge in southwest Indian ocean.

03/2014 **Broadband seismometer deployment** in Shandong Province, China.

TEACHING

2023-Spring I will teach EAS E454/G554 *Fundamentals of Plate Tectonics* in the Spring semester.

ACADEMIC SERVICE

- Reviewer for Journal of Geophysical Research, Geochemistry, Geophysics, Geosystems, and Nature Communications

12/2022 Co-Convener: S017. Microseismicity and fault slip: observations, modeling and experiments. AGU Fall Meeting

06/2022–06/2024 US-InterRidge Steering Committee

04/2022 Co-Convener: Frontiers in Marine Seismology session, SSA Annual Meeting

07/2021–06/2022 IGPP departmental seminar organizer

01/2021 Early career organizing committee: IRIS Marine Seismology Symposium

OUTREACH & COMMUNITY SERVICE

07/2021–07/2022 Co-Vice Chair of Wellness and Sustainability, Postdoc Association of UCSD

08/2019 Woods Hole Science Stroll: Ocean Bottom Seismometer booth

08/2018 Woods Hole Science Stroll: National Deep Submergence Facility booth

PROFESSIONAL MEMBERSHIP

American Geophysical Union

Seismological Society of America

Southern California Earthquake Center