

James Atterholt

PhD Student in Geophysics, California Institute of Technology

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Education

2019-present	California Institute of Technology (Caltech), Pasadena, CA PhD (in progress), Geophysics
2015-2019	Indiana University (IU), Bloomington, IN BS Mathematics BS Geological Sciences

Appointments

2019-present	Graduate Student Researcher, Caltech Seismological Laboratory
2019	NAGT Summer Intern, United States Geological Survey, Golden, CO
2015-2019	STARS Undergraduate Research Assistant, IU Geophysics Laboratory
2017	IRIS Intern, Los Alamos National Laboratory, Los Alamos, NM

Awards and Honors

2020	NSF Graduate Research Fellowship
2019	Faculty Senior Award, IU Geological Sciences
2019	Cora B. Hennel Memorial Scholarship, IU Mathematics
2019	Margaret Russell Edmondson Award, IU Phi Beta Kappa Chapter
2017	Undergraduate Prize, Mineralogical Society of America

Teaching Experience

2022	Instructor, Caltech Earthquake Fellows Program
2021	Teaching Assistant, GE 162 - Seismology, Caltech

Service

2022	Developer, Caltech Earthquake Fellows Program
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2021-2022 Organizer, Caltech Seismo Lab Seminar
2016-2019 Reviewer, IU Journal of Undergraduate Research

Journal Publications

- [6] **Atterholt, J.**, Zhan, Z., and Yang, Y. Fault zone imaging with distributed acoustic sensing: body-to-surface wave scattering. *Journal of Geophysical Research: Solid Earth*, in review.
- [5] Yang, Y., Zhan, Z., Shen, Z., and **Atterholt, J.** (2022). Fault zone imaging with distributed acoustic sensing: surface-to-surface wave scattering. *Journal of Geophysical Research: Solid Earth*, doi: 10.1029/2022JB024329.
- [4] **Atterholt, J.** and Ross, Z.E. (2022) Bayesian framework for inversion of second-order stress glut moments: application to the 2019 Ridgecrest sequence mainshock. *Journal of Geophysical Research: Solid Earth*, doi: 10.1029/2021JB023780
- [3] **Atterholt, J.**, Zhan, Z., Shen, Z., and Li, Z. (2022) A unified wavefield partitioning approach for distributed acoustic sensing. *Geophysical Journal International*, doi: 10.1093/gji/ggab407
- [2] Yang Y., **Atterholt, J.**, Shen, Z., Muir, J.B., Williams, W.F., Zhan, Z. (2021) Sub-kilometer correlation between near-surface structure and ground motion measured with distributed acoustic sensing. *Geophysical Research Letters*, doi: 10.1029/2021GL096503
- [1] **Atterholt, J.**, Brownlee, S.J., and Pavlis, G.L. (2021). Direct P-wave anisotropy measurements at Homestake Mine: implications for wave propagation in the continental crust. *Geophysical Journal International*, doi: 10.1093/gji/ggaa416