

Hannah F. Mark

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EDUCATION

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| 2019 | Ph.D. Marine Geophysics, co-advisors Dr. Daniel Lizarralde and Prof. Mark Behn, MIT-WHOI Joint Program |
| 2014 | B.A. Physics B.S. Geophysical Sciences, University of Chicago |

APPOINTMENTS

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| 2019-present | Fossett Postdoctoral Fellow, co-advisors Prof. Doug Wiens and Prof. Philip Skemer, Washington University in St. Louis |
| 2015-16 | Graduate Research Assistant, co-advisors Dr. Daniel Lizarralde and Prof. Mark Behn, Woods Hole Oceanographic Institution |
| 2013 | Summer Student Fellow, advisor Dr. Daniel Lizarralde, Woods Hole Oceanographic Institution |
| 2011-14 | Undergraduate Research Assistant, advisor Dr. Dion Heinz, University of Chicago |

PUBLICATIONS

- Mark, H. F.**, D. Lizarralde, J. A. Collins, N. C. Miller, G. Hirth, J. B. Gaherty, & R. L. Evans (2019). Azimuthal seismic anisotropy of 70 Ma Pacific-plate upper mantle. *Journal of Geophysical Research: Solid Earth*, 124, DOI: 10.1029/2018JB016451
- Mark, H. F.**, M. D. Behn, J. A. Olive, & Y. Liu (2018). Controls on mid-ocean ridge normal fault seismicity across spreading rates from rate-and-state friction models. *Journal of Geophysical Research: Solid Earth*, 123, DOI: 10.1029/2018JB015545.

AWARDS

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| 2018 | AGU Outstanding Student Paper Award (OSPA), Tectonophysics section |
| 2016 | AGU OSPA, Tectonophysics section |
| 2016 | GeoPrisms OSPA, honorable mention |
| 2015 | National Science Foundation Graduate Research Fellowship |
| 2014 | Walter A. Rosenblith Presidential Fellowship, MIT |
| 2014 | Phi Beta Kappa, Beta of Illinois |
| 2013 | John Crerar Science Writing Prize, University of Chicago |

CONFERENCE ABSTRACTS

- Mark, H. F.**, J. A. Collins, D. Lizarralde, J. B. Gaherty, G. Hirth, R. L. Evans (2018). S-to-P receiver functions for the central Pacific from NoMelt. AGU Fall Meeting, Washington, DC.

- Russell, J. B., **H. F. Mark**, J. B. Gaherty, D. Lizarralde, P. P. Lin, J. A. Collins, G. Hirth, R. Evans (2018). Comprehensive in situ constraints on LPO fabric of fast-spreading oceanic lithosphere from seismic anisotropy. AGU Fall Meeting, Washington, DC.
- Shinevar, W. J., **H. F. Mark**, F. Clerc, E. Codillo, J. A. Olive, J. Gong, S. M. Brown, P. T. Smalls, Y. Liao, V. Le Roux, M. D. Behn (2018). Temporal variability of seafloor spreading processes documented along an 80-Myr geophysical transect across the Mid-Atlantic Ridge. AGU Fall Meeting, Washington, DC.
- Gaherty, J. B., J. B. Russell, **H. F. Mark**, P. P. Lin, E. K. Sarafian, Z. Ma, D. Lizarralde, J. A. Collins, G. Hirth, R. L. Evans, C. A. Dalton (2018). A comprehensive portrait of the central Pacific lithosphere-asthenosphere system from NoMelt seafloor geophysical observations. AGU Fall Meeting, Washington, DC.
- Mark, H. F.**, M. D. Behn, Y. Liu, J. A. Olive (2017). Geometric and thermal controls on normal fault seismicity. AGU Fall Meeting, New Orleans, LA (invited).
- Mark, H. F.**, D. Lizarralde, J. A. Collins, N. C. Miller, G. Hirth, J. B. Gaherty, R. L. Evans (2017). Seismic anisotropy of 70 Ma Pacific-plate upper mantle. AGU Fall Meeting, New Orleans, LA.
- Mark, H. F.**, M. D. Behn, Y. Liu, J. A. Olive (2017). Seismic coupling at divergent plate boundaries from rate-and-state friction. GeoPrisms Theoretical and Experimental Institute on Rift Initiation and Evolution, Albuquerque, NM (invited).
- Mark, H. F.**, M. D. Behn, Y. Liu, J. A. Olive (2016). Seismic coupling at divergent plate boundaries from rate-and-state friction. AGU Fall Meeting, San Francisco, CA.
- Mark, H. F.**, M. D. Behn, Y. Liu, J. A. Olive (2016). Rate-and-state friction models of seismic cycles on oceanic normal faults. Gordon Research Conference on Rock Deformation, Andover, NH (poster).
- Mark, H. F.**, D. Lizarralde, J. B. Gaherty, J. A. Collins, G. Hirth, R. L. Evans, P. P. Lin (2016). Seismic anisotropy in the Pacific upper mantle. Seismology Student Workshop, Lamont Doherty Earth Observatory.
- Mark, H. F.**, D. Lizarralde, J. B. Gaherty, J. A. Collins, G. Hirth, R. L. Evans (2014). Pacific upper mantle seismic anisotropy from the active-source component of the NoMelt experiment. AGU Fall Meeting, San Francisco, CA (poster).
- Heinz, D. L., **H. F. Mark** (2012). The Effect of Wavelength-Dependent Emissivity on the Melting Temperature of Iron from Shock Wave Measurements. AGU Fall Meeting, San Francisco, CA (poster).

INVITED SEMINARS

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| 2018 | Columbia University, Lamont-Doherty Earth Observatory, MGG/SGT seminar |
| 2018 | Woods Hole Oceanographic Institution, Interdisciplinary Biology Seminar Series on Acoustics |

FIELD EXPERIENCE

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| 2017 | R/V <i>Neil Armstrong</i> , AR23-02, collecting underway data along a ridge flowline in the Atlantic |
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2016	R/V <i>Neil Armstrong</i> , AR05, scientific validation cruise
2015	ENAM land seismic experiment, North Carolina, RT-125 deployment and recovery for active-source seismic lines on the Eastern North American Margin
2014	PRIDE SeisORZ seismic experiment, Botswana, RT-125 deployment and recovery for an active-source seismic line across the Okavango Delta in the East African Rift System

TEACHING EXPERIENCE

2018	Kaufman teaching certificate program, MIT Teaching and Learning Lab
2018	Classroom assistant, WHOI Software Carpentries workshop
2017	Lecturer, WHOI Summer Math Review
2017	Co-Instructor, MS-3221: Oceanography, Massachusetts Maritime Academy
2016	Teaching Assistant, MIT 12.702: Elements of Modern Oceanography
2016	Lecturer, WHOI Summer Math Review

SERVICE

2018-19	Steering Committee, 500 Women Scientists of Cape Cod
2015-19	Librarian, MIT-WHOI Joint Program Farrington Collection
2017-18	Blog manager, MIT-WHOI Broader Impacts Group
2015-16	Web administrator, Graduate Women at MIT Mentoring Program
2014-16	Coordinator, WHOI Summer Math Review

SELECTED COMMUNICATION AND OUTREACH

2017	<i>Magazine article:</i> How is the seafloor made? <i>Oceanus</i> Vol. 53, No. 2, Fall 2018.
2017	<i>Public talk:</i> (Way) under the sea: Imaging the rocks beneath the deep ocean. Presented for the Science Made Public lecture series, Woods Hole, MA.
2017	<i>Public talk:</i> The lithosphere-asthenosphere boundary: What it is, where it is, and why you should care. Presented at the Woods Hole Public Library, Woods Hole, MA.
2016	<i>Public talk:</i> Under-under the sea: Imaging the rocks beneath the deep ocean. Presented at the Woods Hole Public Library, Woods Hole, MA.