

# Wenyuan Fan

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<b>EDUCATION</b>	University of California, San Diego, <b>Ph.D.</b> (Geophysics) 2017 Dissertation: Kinematic earthquake source imaging: theory and applications Advisor: Peter Shearer
	Peking University, <b>M.S.</b> (Geophysics) 2011 Thesis: Crust and upper mantle velocity structure of the eastern Tibetan plateau and adjacent regions from ambient noise tomography
	Peking University, <b>B.S.</b> 2008
<b>RESEARCH POSITIONS</b>	Weston Howland Jr. Postdoctoral Scholar 09/2017–now Woods Hole Oceanographic Institution, Woods Hole, MA 02543
	Research Assistant 09/2011–07/2017 Scripps Institution of Oceanography, La Jolla, CA 92093
	Research Assistant 09/2008–07/2011 Peking University, Beijing, China
<b>RESEARCH INTERESTS</b>	Array seismology Earthquake source kinematic and dynamic processes Earthquake interaction and triggering Waveform modeling
<b>AWARDS</b>	Woods Hole Oceanographic Institution Postdoctoral Scholarship 2017
	Lamont-Doherty Earth Observatory Postdoctoral Fellowship (declined) 2017
	AGU Outstanding Student Paper Award (2016) 2017
	Founder Scholarship, Peking University 2010
	Second Prize, Graduate Student Fellowship, Peking University 2010
	First Prize, Graduate Student Fellowship, Peking University 2008-2009
	Undergraduate Research Fellowship, Peking University 2007
<b>PUBLICATIONS</b>	Second Prize, Geophysical Scholarship of Chinese Academy of Sciences 2006-2007
	Current h-index: 9 (Web of Science), 9 (Google Scholar). Total 287 citations, with average 17.94 citations per article (Science Citation Index as of 03/29/2018).
	18. <b>Fan, W.</b> and P. M. Shearer, Coherent seismic arrivals in the P-wave coda of the 2012 Mw 7.2 Sumatra earthquake: water reverberations or an early after-shock?, <i>J. Geophys. Res.</i> , 123, doi: 10.1002/2018JB015573, 2018.

17. **Fan, W.**, D. Bassett, J. Jiang, P. M. Shearer, and C. Ji, Rupture evolution of the 2006 Java tsunami earthquake and the possible role of splay faults, *Tectonophysics*, doi: 10.1016/j.tecto.2017.10.003, 2017.
16. **Fan, W.** and P. M. Shearer, Investigation of back-projection uncertainties with M6 earthquakes, *J. Geophys. Res.*, 122, doi: 10.1002/2017JB014495, 2017.
15. **Fan, W.** and P. M. Shearer, Local near instantaneously dynamically triggered aftershocks of large earthquakes, *Science*, 353, 1133-1136, doi: 10.1126/science.aag0013, 2016.
14. **Fan, W.**, P. M. Shearer, C. Ji, and D. Bassett, Multiple branching rupture of the 2009 Tonga-Samoa earthquake, *J. Geophys. Res.* 121, doi:10.1002/2016JB012945, 2016.
13. Mai, P. M., D. Schorlemmer, M. Page, J.-P. Ampuero, K. Asano, M. Causse, S. Custodio, **W. Fan**, G. Festa, M. Galis, et al., The earthquake-source inversion validation (SIV) project, *Seismol. Res. Lett.* 87(3), doi:10.1785/0220150231, 2016.
12. **Fan, W.** and P. M. Shearer, Fault interactions and triggering during the 10 January 2012 Mw 7.2 Sumatra earthquake, *Geophys. Res. Lett.*, 43, 1934–1942, doi:10.1002/2016GL067785, 2016.
11. Melgar, D., **W. Fan**, S. Riquelme, J. Geng, C. Liang, M. Fuentes, G. Vargas, R. M. Allen, P. M. Shearer, E. J. Fielding, Slip segmentation and slow rupture to the trench during the 2015, Mw8.3 Illapel, Chile earthquake, *Geophys. Res. Lett.*, 43, 961–966, doi:10.1002/2015GL067369, 2016.
10. Denolle, M. A., **W. Fan**, and P. M. Shearer, Dynamics of the 2015 M7.8 Nepal earthquake, *Geophys. Res. Lett.*, 42, 7467–7475, doi:10.1002/2015GL065336, 2015.
9. **Fan, W.** and P. M. Shearer, Detailed rupture imaging of the 25 April 2015 Nepal earthquake using teleseismic P waves, *Geophys. Res. Lett.*, 42, 7467–7475, doi:10.1002/2015GL064587, 2015.
8. **Fan, W.**, Y. Chen, Y. Tang, Sn Zhou, Y. Feng, H. Yue, H. Wang, G. Jin, S. Wei, Y. Wang, Z. Gai, and J. Ning, Crust and upper mantle velocity structure of the eastern Tibetan plateau and adjacent regions from ambient noise tomography, *Chinese J. Geophys.* (in Chinese), 58(5), 1568-1583, doi:10.6038/cjg20150510, 2015.
7. **Fan, W.**, P. M. Shearer, and P. Gerstoft, Kinematic earthquake rupture inversion in the frequency domain, *Geophys. J. Int.* 199, 1138–1160, doi:10.1093/gji/ggu319, 2014.
6. Yue, H., Y. Chen, E. Sandvol, J. Ni, T. Hearn, S. Zhou, Y. Feng, Z. Ge, A. Trujillo, Y. Wang, G. Jin, M. Jiang, Y. Tang, X. Liang, S. Wei, H. Wang, **W. Fan**, and Z. Liu, Lithospheric and upper mantle structure of the northeastern

Tibetan Plateau, *J. Geophys. Res.*, 117, B05307, doi:10.1029/2011JB008545, 2012.

5. Tang, Y., Y. Chen, H. Wang, S. Zhou, J. Ning, Y. Yang, Z. Ding, R. Liu, Y. Feng, P. Li, C. Yu, S. Wei, and **W. Fan**, Ambient noise tomography in north China craton, *Chinese J. Geophys.*, (in Chinese), 54(8), 2011–2022, doi:10.3969/j.issn.0001-5733.2011.08.008, 2011.
4. Tang, X., **W. Fan.**, Y. Feng., Y. Tang., Y. J. Chen, and L. Zhu, Phase velocity tomography of Rayleigh wave in Xinjiang from ambient noise, *Chinese J. Geophys.* (in Chinese), 54(8), 2042–2049, doi:10.3969/j.issn.0001-5733.2011.08.011, 2011.
3. Jiang, M., S. Zhou, E. Sandvol, X. Chen, X. Liang, Y. Chen, and **W. Fan**, 3-D lithospheric structure beneath southern Tibet from Rayleigh-wave tomography with a 2-D seismic array, *Geophys. J. Int.* 185, 593–608, doi:10.1111/j.1365-246X.2011.04979.x, 2011.
2. Wei, S., Y. Chen, E. Sandvol, S. Zhou, H. Yue, G. Jin, T. Hearn, M. Jiang, H. Wang, **W. Fan**, Z. Liu, Z. Ge, Y. Wang, Y. Feng, and J. Ni, Regional earthquakes in northern Tibetan Plateau: Implications for lithospheric strength in Tibet, *Geophys. Res. Lett.*, 37, L19307, doi:10.1029/2010GL044800, 2010.
1. Tang, Y., Y. Feng, Y. Chen, S. Zhou, J. Ning, S. Wei, P. Li, C. Yu, and **W. Fan**, Receiver function analysis at Shanxi Rift, *Chinese J. Geophys.*, (in Chinese) 53(9), 2102–2109, doi:10.3969/j.issn.0001-5733.2010.09.010, 2010.

## SUBMITTED & REVISION

- Ten Brink, U., Y. Wei, **W. Fan.**, N. Miller, and J. Granja-Bruña, Tsunami generated by dynamically-triggered early aftershock of the 2010 Haiti earthquake, in revision, 2017.
- **Fan, W.** and J. J. McGuire, Investigating microearthquake finite source attributes with Oklahoma Wavefield Experiment nodal array, submitted, 2018.
- **Fan, W.** C. de Groot-Hedlin and M. A.H. Hedlin, Using surface waves recorded by a large mesh of three-element arrays to detect and locate disparate seismic sources, submitted, 2018.

## INVITED TALKS

2018 IRIS Workshop, Albuquerque, NM, USA	2018
University of Miami, Miami, FL, USA	2018
WHOI, Woods Hole, MA, USA	2018
Florida State University, Tallahassee, FL, USA	2018
T047, 2017 AGU, New Orleans, USA	2017
MIT, Boston, MA, USA	2017
Stony Brook University, Stony Brook, NY, USA	2017
UC Santa Cruz, Santa Cruz, CA, USA	2017
Caltech, Pasadena, CA, USA	2016
Harvard University, Cambridge, MA, USA	2016
Brown University, Providence, RI, USA	2016
LDEO, Columbia University, Palisades, NY, USA	2016
Earthquake Science Summer School, Lake Yamanakako, Japan	2015

<b>FUNDING</b>	Student Funds:	
	CIDER Summer Program	2017
	SSA Annual Meeting Travel Grants	2017
	SCEC-ERI Summer School Travel Award	2014–2016
	SIO Department Graduate Student Excellence Travel/Research Award	2015–2016
	NMEM2015 Travel Award	2015
	USArray Short Course Travel Award	2013,2017
	CIG/QUEST/IRIS Joint Workshop Travel Award	2013
<b>TEACHING EXPERIENCE</b>	Guest lecturer, Graduate, Seismic interferometry, SDSU	2015
	TA, Undergraduate, Seismological Experiment Practice Course, PKU	2010
	TA, Undergraduate, Introduction to Earthquakes, PKU	2010
	TA, Undergraduate, Methods of Mathematical Physics, PKU	2009
<b>AFFILIATIONS</b>	American Geophysical Union (AGU)	
	Seismological Society of America (SSA)	
	Southern California Earthquake Center (SCEC)	
<b>SERVICE</b>	Journal Referee: Geophysical Research Letters, Geophysical Journal International, Bulletin of the Seismological Society of America, Journal of Geophysical Research: Solid Earth, Tectonophysics	
	Meeting Activities:	
	SSA 2017, Session Conveners:	
	<ul style="list-style-type: none"> <li>• Earthquake Complexities Revealed by Kinematic and Dynamic Modeling and Multiple Geophysical Data Sets</li> <li>• Earthquake Interaction and Triggering: From Near Field to Far Field, From Natural to Induced</li> </ul>	
	2017 AGU, Primary Convener of S43E and S51A:	
	<ul style="list-style-type: none"> <li>• Earthquake Rupture Revealed by Kinematic Source Imaging</li> </ul>	
	Community Involvements: Organization Committee, Queer Engineers, Scientists, and Technical Professionals (QuEST) at U.C. San Diego	
<b>FIELD EXPERIENCE</b>	North China craton array project, 35 days in total.	
	Necessarray project, 16 days in total.	
	INDEPTH IV project,15 days in total.	