

# XIE FAN

## Associate Researcher

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## RESEARCH INTERESTS

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Nonlinear acoustics and nonlinear elasticity in heterogeneous medium  
Interferometric time series analysis  
Inverse problems in random and complex medium

## WORK EXPERIENCE

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| 2011-     | Associate Research Scientist<br>Institute of Geophysics, China Earthquake Administration, China |
| 2013-2014 | Visiting Scientist<br>Isterre, CNRS & Université Joseph Fourier, France                         |

## EDUCATION

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| 2007-2011 | Ph.D in solid geophysics<br>Institute of Geophysics, China Earthquake Administration, Beijing, China |
| 2004-2011 | M.S in communications engineering<br>China University of Geosciences, Beijing, China                 |
| 1999-2003 | B.S in computer science<br>Jilin University, Jilin, China  |

## PUBLICATIONS

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1. **XIE Fan**, Larose E., Moreau L. 2016. Characterizing extended changes in a multiple scattering medium: numerical simulations. *Waves in Random and Complex Media*, preparing.
2. **XIE Fan**, Moreau L., Larose E. 2016. A probabilistic approach to locate the changes in heterogeneous medium with coda waves. *Ultrasonics*, 65:106-114.
3. **XIE Fan**, Guo Z.W., Zhang J.W. 2014. Strategies for reliable second harmonic of nonlinear acoustic wave through cement-based materials, *Nondestructive Testing and Evaluation*, 29(3):10-21
4. **XIE Fan**, Ge H.K., Guo Z.W. 2013. The Measurement of Acoustic Nonlinearity Parameter Using Second Harmonics in Cement Specimens. *Chinese Journal of Mechanical Engineering* (in Chinese), 9077:156-162
5. Guo Z.W., Ge H.K., **XIE Fan**. 2013. Ultrasonic harmonic characteristic in rock and its variation with stress. *Journal of Chinese University of Petroleum* (in Chinese), 37(3):50-56
6. **XIE Fan**. 2012. Methods and Application on Reducing Man-made Electromagnetic Noise in Geomagnetic Field Observation. *Progress in Geophysics* (in Chinese). 27(3): 967-976

## CONFERENCES & PROCEEDINGS

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1. A Novel Experiment Method of Evaluating the Brittleness of Rock. *SPE/EAGE European Unconventional Resources Conference and Exhibition*. Vienna, Austria, 2014.