# XIAO Xiao 肖晓

# Ph.D Candicate

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ORCID: 0000-0001-7247-561X Email: xiaox17@mail.ustc.edu.cn

Github: seispider

Website: me.seispider.top

School of Earth and Space Sciences
University of Science and Technology of China
Room 1127, Research Building

No. 96, Jinzhai Road, Hefei, Anhui 230026, China

### Education

2017 – on **Ph.D Candicate**, University of Science and Technology of China, Hefei, China

2013 – 2017 BSc in Geophysics, WuHan University, Wuhan, China

### Research Interests

Structure and Evolution of the Earth's Lithosphere

Theory and Applications of Seismic Tomography

Observations of Earthquake Source

### Awards & Honors

2017 Outstanding undergradute graduates of WuHan University

2017 Outstanding undergradute thesis of WuHan University

### **Professional Societies & Activities**

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2019	Student Organize	er or "weekiv Gradua	le Student Seminar	of Geophysics, USTC"

2017 Secretary of the Foundation Exchange Meeting of China Seismological

Reference Model

2017 – on Member of the American Geophysical Union (AGU)

2017 – on Research assistant and database manager for China Seismological Reference

Model

2016 – on Contributor of GMT China Community

### Peer-reviewed Publications

<sup>\*</sup>corresponding author

Xiao, X.\*, Sun, L., Wang, X., & Wen, L. Simultaneous inversion for surface wave phase velocity and earthquake centroid parameters: methodology and application. *Journal of Geophysical Research: Solid Earth*. doi:10.1029/2022JB024018.

Yao, J., Wu, S., Li, T., Bai, Y., **Xiao, X.**, Hubbard, J., Wang, Y., He, Y., Thant, M., & Tong, P. Imaging the upper 10 km crustal shear-wave velocity structure of central Myanmar via a joint inversion of body-wave polarizations and receiver functions. *Seismological Research Letter*. doi:10.1785/0220210292.

Cheng, S., **Xiao**, **X.**, Wu, J., Wang, W., Sun, L., Wang, X., & Wen, L. Crustal Thickness and Vp/Vs Variations Beneath the Continental China Revealed by Receiver Function Analysis. *Geophysical Journal International*. doi:10.1093/gji/ggab022

**Xiao, X.\***, Cheng, S., Wu, J., Wang, W., Sun, L., Wang, X., & Wen, L. Shallow seismic structure beneath China revealed by P wave polarization, Rayleigh wave ellipticity and receiver function. *Geophysical Journal International*. doi:10.1093/gji/ggab433.

### Papers Submitted/Under Review

Mao, S., Cheng, S., **Xiao, X.**, Wu, J., Wang, W., Sun, L., Wang, X., & Wen, L. *Journal of Geophysical Research: Solid Earth [Submitted]* 

# Papers in Preparation

**Xiao, X.**, Cheng, S., Wu, J., Wang, W., Sun, L., Wang, X., & Wen, L. A Preliminary Crustal Shear Wave Velocity Model for the continental China.

### **Presentations**

on

### **Invited & Keynotes**

Xiao, X., Cheng, S., & Wen, L. Shallow shear wave structure beneath China revealed by rayleigh wave ellipticity and receiver function. *USTC*, Dec. 25, 2018. [Student Seminar]

#### Other Presentations

Xiao, X., Sun, L., Wang, X., & Wen, L. Simultaneous inversion for surface wave phase velocity and earthquake centroid parameters: methodology and application. *AGU* 2022, Chicago, IL, USA and *CGU* 2022, Online, CHN

Xu, Y., Sun, L., Hao, J., Lu, Z., **Xiao, X.**, & Wen, L. Source properties of 17 June 2019 Changning earthquake (Mw 6.2), China and its aftershocks. *AGU 2019*, San Francisco, CA, USA.

Zhu, J., Lu, Z., Xu, Y., **Xiao, X.**, Wang, X., & Wen, L. Temperature-related Martian seismic events observed by InSight. *AGU 2019*, San Francisco, CA, USA.

Mao, S., Cheng, S., **Xiao, X.**, Wu, J., & Wen, L. A three-dimensional receiver function migration method imaging the crustal structure in Sichuan-Yunnan Region, Southwest China. *AGU 2019*, San Francisco, CA, USA.

Lu, Z., **Xiao, X.**, Cheng, S., Wang, X., Zhu, J., & Wen, L. Shallow Martian Seismic Velocity Structure Inferred from InSight's Seismic Signals Produced by Air Pressure Variations. *AGU 2019*, San Francisco, CA, USA.

**Xiao, X.**, Cheng, S., & Wen, L. A Preliminary Crustal Shear Wave Velocity Model for the continental China. *AGU 2019*, San Francisco, CA, USA.

Xiao, X., Cheng, S., & Wen, L. Shallow seismic structure beneath China revealed by body-wave polarization and Rayleigh-wave ellipticity. *AGU 2018*, Washington, DC, USA.

Xiao, X., & Wen, L. 3D Crust and Uppermost Mantle Structure beneath Tian Shan Region from ambient noise and earthquake surface waves. *AGU 2017*, New Orleans, LA, USA.

# **Expertise & Skills**

**Languages** : Mandarin Chinese, English.

**Programming**: Python, Fortran, C, Matlab, Shell, LaTeX.

**Seismological Tools**: SAC, GMT, SOD, ObsPy, TauP, CPS330.

**Synthetics**: Reflectivity Method, Modal Summation, Generalized Ray Theory,

Finite Difference.

# Glossary

These are the meanings of the symbols used throughout this document:

C Link to a code repository on GitHub

• An ordinary link

- Link to presentation slides
- Field of research