

WEIFAN LU

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ACADEMIC POSITIONS

Université Grenoble-Alpes , Grenoble, France	2025.12 - Present
Postdoctoral Fellow	
Advisor: Nikolai Shapiro	
The University of Tokyo , Tokyo, Japan	2025.07 - 2025.12
Postdoctoral Fellow	
Advisor: Satoshi Ide	

EDUCATION

The University of Tokyo , Tokyo, Japan	2023.11 - 2025.07
Visiting Ph.D. Student in Geophysics	
Advisor: Satoshi Ide	
Peking University , Beijing, China	2019.09 - 2025.07
Ph.D. in Geophysics	
Advisor: Han Yue & Lian Xue	

AWARDS AND HONORS

JSPS Postdoctoral Fellowship , Japan	2026
Merit Student Award, Peking University	2022,2023
Tung OOCL Scholarship, Peking University	2023
President Scholarship , Peking University	2022
Outstanding Scientific Research Award, Peking University	2021
Outstanding Presentation, China Seismic Experimental Site Conference	2020
National Scholarship , Ministry of Education of the People's Republic of China	2016,2018
Mathematical Contest In Modeling Certificate of Achievement Meritorious Winner (top 10%)	2018
Liu Guang-Ding Geophysics Scholarship, Liu Guang-Ding Science Foundation	2017

PUBLICATIONS

In review or revision

[S3] Lu,W*. (2025). Migration of Multimodal Deep Earthquake Swarm beneath the Abu Volcano Group, Japan (Under Review, *Geophysical Research Letters*)

[S2] Lu,W*, and Ide, S. (2025). Spatiotemporal Characteristics of Tectonic Tremor in California (Under Review, *Geophysical Research Letters*)

[S1] Yue, H*, Lu,W., and Li, G. (2025). Post-foreshock transient slip facilitates the mainshock occurring during the 2016 Kumamoto earthquake sequence: the fourth foreshock evolution mode (Under Review, *Earth and Planetary Science Letters*)

Peer reviewed

First-authored

[1] Lu,W., Xue, L*, Yue, H., Zhuang, J., and Zhao, L. (2025). Exploring Tidal Modulation of Seismicity in Southern California. *Journal of Geophysical Research: Solid Earth*. doi.org/10.1029/2025JB032249

[2] Lu,W*, Ide, S., and Yue, H. (2025). Small-scale stress heterogeneity inferred many Anti-repeating earthquakes

- in Sierra Valley, Nevada. *Earth, Planets and Space*. doi.org/10.1186/s40623-025-02273-y
- [3] **Lu,W***, Ide, S., and Yue, H. (2025). Feature of cascading rupture frequently observed in Northern California. *Communications Earth Environment*. doi.org/10.1038/s43247-025-02138-y (Behind the Paper)
- [4] **Lu,W.**, Zhao, Z., Yue, H*, Zhou, S., Wu, J., and Song, X. (2024). The Accessible Seismological Dataset of the high-density 2D seismic Array along Anninghe Fault. *Earthquake Science*. doi.org/10.1016/j.eqs.2023.11.001 (Article Highlights)
- [5] **Lu,W.**, Zhou, Y., Zhao Z., Yue, H*, and Zhou, S. (2022). Aftershock sequence of the 2017 Mw 6.5 Jiuzhaigou, China earthquake monitored by an AsA network and its implication to fault structures and strength. *Geophysical Journal International*. doi.org/10.1093/gji/ggab443 (PKU SESS News)
- Co-authored*
- [6] Zhao, Z., Xue, L*, Burgmann, R, Heimisson E, **Lu,W.**, Yue, H. (2025). Periodic seismicity modulations reveal important roles of pore fluid behaviors in controlling fast and slow earthquakes. *Science Advances*. doi/10.1126/sciadv.ady6350
- [7] Yue, H*, Shen, Z.-K., Zhao, Z., Wang, T., Cao, B., Li, Z., Bao, X., Zhao, L., Song, X., Ge, Z., Ren, C., **Lu,W.**, Zhang, Y., Liu-Zeng, J., Wang, M., Huang, Q., Zhou, S., and Xue, L. (2022). Rupture process of the 2021 M7.4 Maduo earthquake and implication for deformation mode of the Songpan-Ganzi terrane in Tibetan Plateau. *Proceedings of the National Academy of Sciences*. doi.org/10.1073/pnas.2116445119
- [8] Chang, Y., Liang, C*, Cao, F., Zhou, L., Liao, J., **Lu,W.**, and Wang, C. (2022). Seismic Velocity Structure for the Anninghe - Zemuhe Fault Zone by Wave Gradiometry Analysis. *Chinese Journal of Geophysics* (in Chinese)
- [9] Yue, H*, Sun, J., Wang, M., Shen, Z., Li, M., Xue, L., **Lu,W.**, Zhou, Y., Ren, C., and Lay, T. (2021). The 2019 Ridgecrest, California earthquake sequence: Evolution of seismic and aseismic slip on an orthogonal fault system. *Earth and Planetary Science Letters*. doi.org/10.1016/j.epsl.2021.117066

SELECTED CONFERENCE PRESENTATIONS

- [1] **Lu, W.**, Ide, S., and Yue, H. Small-scale Stress Heterogeneity Inferred Many Anti-Repeating Earthquakes in the Sierra Valley, Nevada (Poster), *JpGU Meeting*, Chiba, Japan, 2025
- [2] **Lu, W.**, Ide, S., and Yue, H. Feature of cascading rupture frequently observed in Northern California (Poster), *AGU Fall Meeting*, Washington, D.C, USA, 2024
- [3] **Lu, W.**, Ide, S., and Yue, H. Feature of cascading rupture frequently observed in Northern California (Oral), *SSJ Meeting*, Niigata, Japan, 2024
- [4] **Lu, W.**, Ide, S., and Yue, H. Large and small earthquakes can have similar seismic wave onsets of the San Andreas fault in Northern California (Oral), *Japan Geoscience Union*, Chiba, Japan, 2024
- [5] **Lu, W.**, Xue, L., and Yue, H. Tidal Modulation Constrained Fault Properties: A Case Study of Southern California, USA (Poster), *AGU Fall Meeting*, San Francisco, USA, 2023
- [6] **Lu, W.**, Xue, L., and Yue, H. Tidal Triggering of Earthquakes in Southern California (Oral)(Online), *AGU Fall Meeting*, Chicago, USA, 2022
- [7] **Lu, W.**, Xue, L., and Yue, H. Tidal modulation of seismicity in Southern California (Poster)(Online), *AGU Fall Meeting*, New Orleans, USA, 2021
- [8] **Lu, W.**, Yue, H., and Zhou, Y. Aftershock sequence and fault geometry of the 2017 Mw 6.5 Jiuzhaigou earthquake: an application of AsA network, denoising algorithms and fault geometry determination techniques (Oral), *AGU Fall Meeting*, San Francisco, USA, 2019

SEMINARS / TALKS

Short Visit, GNS Science, Wellington, New Zealand	2025
Short Visit, Monash university, Melbourne, Australia	2025
1st Mini-Workshop of the ANR PREMs Project, ENS, (Invited), Online, Franch	2025
Yunnan University (Invited), Kunming, China	2025
Short Visit, MIT, Boston, USA	2024
Joint-seminar with DPRI, Kyoto University, Kyoto, Japan	2024
Youth Forum on Earthquake Science and Technology (Invited), Beijing, China	2022

SERVICES

Reviewer: Journal of Geophysical Research: Solid Earth (2)	2024 - Present
Seismological Research Letters (1)	2022 - Present
Earthquake Science (1)	2025 - Present
Volunteer: Science of slow to fast earthquake (JpGU Meeting)	2024 - Present
Book: Memories of Professor Don Helmberger Master of Seismology and Mentor Extraordinaire	2023

AFFILIATIONS/MEMBERSHIPS

American Geophysical Union (AGU)	2019 - Present
Japan Geosciences Union (JpGU)	2024 - Present
Seismological Society of America (SSA)	2025 - Present
Seismological Society of Japan (SSJ)	2024 - Present

TEACHING EXPERIENCE

Teaching Assistant: Geophysics Essay Writing in English	Spring 2021
Earthquake Observation Internship	Spring 2018
Research Mentoring: Peking Univ. undergraduate student Yan Pei	2022-2023
Peking Univ. visiting undergraduate student Lemeng Wang (Univ. of Toronto)	2024

SOFTWARE

Auto-FtCluster: Determine the geometry of fault using earthquake location and focal mechanism

COMPUTER AND SKILLS

Programming: Python, Matlab, Bash, L^AT_EX

Software: GMT, SAC, Obspy, HypoDD, Hypoinverse, Template Matching, ETAS, HASH

FIELD EXPERIENCE

Aanninghe-Zemuhe Array, 161 short-period seismometers, lead field student	2020-2021
Longmenshan Array of small Array: 50 short-period seismometers, lead field student	2018-2020