YANG LU (LYU)

University of Vienna

PERSONAL DETAILS

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POSITIONS

· **University Assistant, University of Vienna** *- from 2021.07*

· **Postdoc, University of Southern California** *2021.06*
Topic: Merging multi-scale velocity models

· **Postdoc, CNRS (Centre national de la recherche scientifique)** *2019.10*
Topic: Seismic noise field in Europe

EDUCATION

· **Ph.D., ISTerre (Institut des Sciences de la Terre)** *2019.03*
Dissertation: Tomography of the alpine arc using noise correlations & waveform modelling

· **M.Sc., Université Grenoble Alpes** *2015.06*
Majoring in Geophysics (Solid Earth)

· **B.Sc., Université Joseph Fourier** *2013.06*
Majoring in Geoscience

INTERNSHIPS

· Influence of topography on surface wave propagation *2014-2015*
Orientation: Seismic waveform simulation

· Solving the Eikonal equation using fast sweeping method *2013-2014*
Orientation: Travel time tomography

PUBLICATIONS

· **Lu, Y.**, & Ben-Zion, Y., 2021. Validation of the southern California seismic velocity models with full waveform simulation (in review)

· **Lu, Y.**, & Ben-Zion, Y., 2021. Regional seismic velocity changes following the 2019 Mw7.1 Ridgecrest California earthquake from autocorrelations and PS converted waves (in review)

· **Lu, Y.**, Pedersen, H., Stehly, L., and AlpArray Working Group, 2021. Mapping the seismic noise field in Europe: spatio-temporal variations in wavefield composition and noise source contributions. (in review)

· Fayjaloun, R., Dabaghi, M., Cornou, C., Causse, M., **Lu, Y.**, Stehly, L., and Voisin, C., 2021. Hybrid Near-fault seismic ground motion in Lebanon. (in review)

· Malusà, M.G. et al., 2021. The deep structure of the Alps based on the CIFALPS Seismic experiment: a synthesis. Geochem. Geophys., (22)3, e2020GC009466, doi: 10.1029/2020GC009466

· **Lu, Y.**, Stehly, L., Brossier, R., Paul, A., and AlpArray Working Group, 2020. Imaging Alpine crust using ambient noise wave-equation tomography.Geophys. J. Int., 222(1), 69-85, doi: 10.1093/gji/ggaa145

· Zhao, L., Malusa, M.G., Yuan, H., Paul, A., Guillot, S., **Lu, Y.**, Solarino, S., Eva, E., Lu, G., Bodin, T., and CIFALPS group, 2020. Evidence for a serpentinized plate interface favouring continental subduction. Nat. Commun, (11) 2171, doi: 10.1038/s41467-020-15904-7

· Kaviani, A., Paul, A., Moradi, A., Mai, P.M., Pilia, S., Boschi, L., Rümpker, G., **Lu, Y.**, Tang, Z., and Sandvol, E., 2020. Crustal and uppermost mantle shear wave velocity structure beneath the Middle East from surface wave tomography, Geophys. J. Int., 221(1), doi: 10.1093/gji/ggaa075

· **Lu, Y.**, 2019. Tomography of the alpine arc using noise correlations & waveform modelling, phd dissertation, NNT: 2019greau003, tel-02148214

· **Lu, Y.**, Stehly, L., Paul, A., and AlpArray Working Group, 2018. High-resolution surface wave tomography of the European crust and uppermost mantle from ambient seismic noise, Geophys. J. Int., 214 (2), 1136-1150, doi:10.1093/gji/ggy188

· Moreau, L., Stehly, L., Boué, P., **Lu, Y.**, Larose, E., and Campillo, M., 2017. Improving ambient noise correlation functions with an SVD based Wiener filter, Geophys. J. Int.,201(1), 418-426, doi: 10.1093/gji/ggx306

Article manuscripts to be submitted

· Korostelev, F., **Lu, Y.**, Magrini, F., Boschi, L., Leroy, S., 2021. Images of the African rift by globle adaptive-resolution surface-wave tomography (in prep.)

· Fang, H., White, M., **Lu, Y.**, Van der Hist, R.D., Ben-Zion, Y., 2021. Regional seismic velocity models for Southern California based on travel time tomography with Poisson Voronoi cells parameterization (in prep.)

COMMUNICATION

Conferences

SSA Annual Meeting 2021 *2021.04*
Talk: Regional seismic velocity changes following the 2019 Mw7.1 Ridgecrest California earthquake from autocorrelations and PS converted waves

AGU Fall Meeting 2020 *2020.12*
Talk: Validation of seismic velocity models in southern California with full-waveform simulations

2020 SCEC annual meeting *2020.09*
Poster: Validation of seismic velocity models in southern California with full-waveform simulations

EGU General Assembly 2019 in Vienna *2019.04*
Talk: Ambient noise wave-equation tomography of the Alpine crust and uppermost mantle: outcomes of the new Vs model on the structure of the deep crusts

Seiscope annual meeting in Grenoble *2019.04*
Talk: Ambient noise wave-equation tomography of the Alpine crust and uppermost mantle

AlpArray surface wave research group meeting in Vienna *2019.04*
Talk: Ambient noise Eikonal tomography for azimuthal anisotropy in the Alpine crust

AlpArray surface wave research group meeting in Lyon *2019.02*
Talk: Ambient noise wave-equation tomography of the Alpine crust and uppermost mantle

AGU Fall Meeting 2018 in Washington, D.C. *2018.12*
Talk: Ambient noise wave-equation tomography of the Alpine crust and uppermost mantle

AlpArray Science meeting in Zurich *2018.08*
Talk: Tomography of the alpine arc using ambient seismic noise correlation & waveform modeling

EGU General Assembly 2018 in Vienna *2018.04*
Talk: High-resolution surface wave tomography of the European crust and uppermost mantle from ambient seismic noise.
Poster: Moho depth of the Alpine region from ambient seismic noise

AlpArray surface wave research group meeting in Vienna *2017.11*
Talk: Tomography of the Alpine region using noise correlation & waveform modelling

EGU General Assembly 2017 in Vienna *2017.04*
Poster: Surface wave tomography of Europe from ambient seismic noise

AlpArray surface wave research group meeting in Bologna *2016.11*
Talk: Surface wave tomography of Europe from ambient seismic noise

Seiscope annual meeting in Grenoble *2015.04*

Visits

Visit to Dr. Andreas Fichtner in ETH Zurich *2018.02*
Visit to Dr. Lapo Boschi in UPMC Paris *2016.04*

Workshops

"SCEC CVM workshop: multi-scale seismic velocity models - imaging and validation studies" *2020.06*
"Ambient Noise Imaging and Monitoring" in Cargese *2017.06*
"Seismic imaging of upper mantle" in Les Houches *2016.10*

SKILLS

Programming languages	Python, Fortran, Matlab

LANGUAGES

Chinese	native
English	full professional proficiency
French	limited working proficiency

PROFESSIONAL SERVICES

Journal Article Reviewer	Journal of Geophysical Research
	Geophysical Journal International
	Acta Geophysica
	Tectonophysics