Curriculum Vitæ – Laura A. Ermert

Personal information

Name	Laura Anna Ermert
Born	07.05.1987
Nationality	German
Orcid ID	0000-0001-9862-2710
Web of Science	15 documents 197 citations excluding self-citations, h-index 10

Professional experience

1.05.2022 – currently	Scientific employee, Swiss Seismological Service (SED), ETH Zurich, Zurich, Switzerland. Working on the modeling of micro-earthquakes and interferometry in geothermal environments.
15.01.2021 – 30.04.2022	Postdoctoral scholar, University of Washington, Seattle WA, USA Working on ambient noise monitoring of subsidence in the Mexico City basin with Asst. Prof. Marine Denolle
15.01.2020 – 14.01.2021	Postdoctoral fellow, Harvard University, Cambridge MA, USA Working on ambient noise monitoring of subsidence in the Mexico City basin with Asst. Prof. Marine Denolle
23.09.2019 – 18.10.2019	Short-term visitor, Earthquake Research Institute, University of Tokyo, Tokyo, Japan. Host: Prof. Kiwamu Nishida
01.04.2018 – 30.09.2019	SNF Postdoc mobility fellow, University of Oxford, Oxford, United Kingdom. Advisor: Prof. Tarje Nissen-Meyer

Education

01.05.2013 – 29.03.2018	Doktorin der Wissenschaften (Dr. sc. ETH), ETH Zurich, Switzerland (Date of PhD defense: 30. June 2017) Advisor: Prof. Andreas Fichtner Thesis title: Ambient seismic source inversion
12.09.2011 – 11.04.2013	Master of Sciences in Geophysics (MSc ETH with distinction), ETH Zurich, Switzerland Advisors: Dr. Valerio Poggi, Dr. Jan Burjanek, Prof. Donat Fäh

Thesis title: New strategies for the identification of 2-D basin resonances

17.09.2007 – 11.01.2011	Bachelor of Science in Earth Sciences (BSc ETH), ETH Zurich, Zurich, Switzerland
04.09.2006 – 03.08.2007	Propædeutic studies at Leibniz Kolleg, Tübingen, Germany

Honors and Awards

2013	ETH Medal (Outstanding MSc thesis award)
2013	Swiss society for earthquake engineering and structural dynamics MSc thesis award
2007 – 2013	Scholar of the German National Academic Foundation

Invited talks

21.06.2021	Imaging ambient seismic sources (remote presentation) SIAM Conference on Mathematical & Computational Issues in the Geosciences
29.03.2021	Modeling cross-correlations with variable noise sources (remote presentation) Utah SeismoTea, University of Utah
27.09.2019	Ambient noise cross-correlation modelling and inversion Workshop Frontiers in Seismic Interferometry, Academia Sinica, Taipei, Taiwan
21.06.2018	Imaging ambient seismic sources Doctoral defense symposium of Nienke Blom, University of Utrecht, Utrecht, Netherlands
24.05.2018	Ambient noise source inversion in a heterogeneous Earth Earthquake seismology group seminar, Harvard University, Cambridge MA
21.09.2016	Software Tutorial on ambient seismic noise processing, TIDES Advanced training school, Sesimbra, Portugal

Funding

2019	Earthquake Research Institute (University of Tokyo) short-term visitor
2019	Roland Schlich Travel grant, EGU General Assembly (Conference fee waiver)
2018 – 2019	Swiss National Science Foundation Postdoc Mobility (Grant Number 175124)

2016	Japanese Society for the Promotion of Science Strategic Fellowship (3 months)

Teaching assistance and student mentoring

2019	Co-supervisor of Jonas Igel, MSc ETH Zürich
2018	Vector Calculus, Earth Science undergraduate, Oxford University (Michaelmas)
2013 – 2015 days each	Geophysical Fieldwork, Earth Science undergraduates, ETH Zürich (2-3 field spring term)
2011	Dynamische Erde for Earth Science undergraduates, ETH Zürich
2010	Mathematik I & II for Earth / Agriculture / Food Science, ETH Zürich

Peer Review

Reviewer	Geophysical Research Letters; Geophysical Journal International (Outstanding reviewer 2019), Journal of Geophysical Research: Solid Earth (Editor's citation for excellence in refereeing 2019)

Conference session organization

2022	EGU General assembly session "Ambient Seismic Noise & Seismic Interferometry" (co-convener)
2021	AGU Fall meeting session "Correlation seismology" (co-convener)
2021	EGU General assembly session "Ambient seismic noise" (lead convener)
2020	Webinar series "Correlation seismology" (co-organizer)
2020	AGU Fall meeting session "Correlation seismology" (co-convener)
2020	EGU General assembly session "Ambient seismic noise" (co-convener)
2019	EGU general assembly session "Ambient seismic noise" (co-convener)

Outreach and workplace initiatives

2021	University of Washington College of the Environment Postdoc "Pecha Kucha" lightning talks (speaker)
2016 – 2018	EGU seismology division blog co-editor 2016-2018 (Blog posts)
2018	Co-organizer "Seismology for non-seismologists" at EGU General Assembly

2017	Co-founder of ETH Dept. of Earth Sciences "help!desk" for PhD students
2015	Co-organizer, ETH Dept. of Earth Sciences PhD retreat 2015

Training schools attended

17.02. - 21.02.2019	MESS (Munich Earth Skience School), Sudelfeld, Germany Topic: Machine learning in Earth Sciences New skills acquired: Gradient back-propagation for neural networks, random forest classification, K-means clustering
10.07. - 14.07.2017	TIDES advanced training school, Oxford, UK Topic: Seismic tomography and uncertainties New skills acquired: Markov chain Monte Carlo inversion
1.05. - 5.05.2015	TIDES advanced training school, Bertinoro, Italy Topic: Seismic data modelling New skills acquired: SPECFEM3D_globe (wave propagation simulation), instaseis (wave propagation database software in Python)
10.03.-15.03.2013	MESS (Munich Earth Skience School), Sudelfeld, Germany Topic: obspy meets archiving and simulation New skills acquired: Python, obspy (seismologic Python library)