# 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** 

15.01.2021 – currently 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
<b>Honors and Award</b>	s	
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		
S	F411 F	December 1. Decemb
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 Le	tters; 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

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
TIDES advanced training school, Oxford, UK
Topic: Seismic tomography and uncertainties
New skills acquired: Markov chain Monte Carlo inversion
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)
MESS (Munich Earth Skience School), Sudelfeld, Germany
Topic: obspy meets archiving and simulation
New skills acquired: Python, obspy (seismologic Python library)