

Prof. Dr. Céline M. Hadziioannou

CONTACT INFORMATION	Institute of Geophysics University of Hamburg Bundesstrasse 55 20146 Hamburg Germany	Phone: +49 (0)40 42838 2980 ORCID.ORG/0000-0002-5312-2226 celine.hadziioannou@uni-hamburg.de http://celine.hadzii.com
CITIZENSHIP	French and Greek	
DATE OF BIRTH	April 29, 1983	
RESEARCH INTERESTS	Ambient seismic noise and its sources; Ocean–Solid-Earth interaction, Seismic interferometry; Scattered wavefields; Coda waves; Monitoring time-dependent material changes; Noise correlation tomography	
ACADEMIC APPOINTMENTS	University of Hamburg <i>Junior Professor in Seismology</i>	Hamburg, Germany 2017 – present
	Ludwig-Maximilians University Munich (LMU) <i>Leader of the Emmy Noether Research Group</i> “The origin of Love waves in the ocean generated noise wave field”	Munich, Germany 2013 – 2017
	Ludwig-Maximilians University Munich (LMU) <i>Postdoctoral Researcher</i> Marie Curie QUEST ITN Postdoctoral fellow Research: “Rotational motions, ambient noise and diffuse wavefields”	Munich, Germany 2011 – 2013
EDUCATION	Institut des Sciences de la Terre (ISTerre) <i>PhD, Seismology</i> Research: “Seismic waves in complex media: measuring temporal velocity variations” Advisors: Prof. Dr. Michel Campillo and Dr. Eric Larose	Grenoble, France 2007 – 2011
	Universiteit van Utrecht (UU) <i>Master of Science, Geophysics</i>	Utrecht, the Netherlands 2005 – 2007
	Rijksuniversiteit Groningen (RuG) <i>Bachelor of Science, Astrophysics</i>	Groningen, the Netherlands 2001 – 2005
HONOURS & AWARDS	Emmy Noether research fellowship (DFG)	2013
	Member of the LMU Center for Advanced Studies (CAS LMU)	2014 – present
	Member of AcademiaNet (Robert Bosch Stiftung)	2014 – present
PROFESSIONAL SERVICE	Member of the DEPAS pool steering committee (German instrument pool for amphibian seismology)	2018 – present
	Member of the German Geophysical Society (DGG) Equal opportunity committee	2018 – present
	Member of LMU University Research Board	2014 – 2019
	Representative of LMU and the University of Hamburg as associate partner in Marie Curie ITN “ WAVES ” (coordinated by Dr. Lapo Bosci, UPMC Paris)	2015 – 2018
	Work package co-chair in Marie Curie COST action “ TIDES ” (coordinated by Dr. Andrea Morelli, INGV Bologna)	2014 – 2017
	Collaborator in the ERC project “ ROMY ” (PI: Prof. Dr. Heiner Igel, LMU)	2014 – 2019

WORKSHOPS &
CONFERENCES

- Programme Committee** COST-TIDES 4th Training school in Prague, Czech Republic 2018
- Organization Committee** AMÜSE PhD Conference in Hinterriss, Austria 2016
- Organization Committee** 4th IWGoRS Meeting on Rotational Seismology in Tutzing, Germany 2016
- Organized** workshop "The Earth's Hum" in Munich 2014
- Organization Committee** for 4th QUEST workshop 2013
- Organization Committee** Workshop "Noise and Diffuse Wavefields" in Neustadt an der Weinstrasse, Germany 2012
- Session Convener & Chair** of the yearly Ambient Seismic Noise session at EGU General Assembly, Vienna, Austria 2012–2019
- Session Convener** of Rotational Seismology session at EGU General Assembly, Vienna, Austria 2018–2019
- Session Convener & Chair** of "Seismic Noise" session (invited) at the 76th yearly meeting of the German Geophysical Society (DGG) 2016
- Session Convener & Chair**, AGU Fall Meeting, San Fransisco, USA 2015
- Peer Reviewer** for Research grants (Helmholtz Association, ETH Research commission, LMU Research Board) and for Scientific journals (GRL, GJI, JGR, J. Appl. Geophysics, J. of Seism.)

REFEREED
JOURNAL
PUBLICATIONS

- Citations \approx 950; h-index 10; Source: [Google Scholar](#)
- Students under my supervision are indicated with a red star*, postdocs with a black star*
- 25. C. Hadziioannou**, J. Salvermoser*, R. Steinmann*, L. Marten*, E. Niederleithinger
Structural health monitoring meets ambient noise seismology
Solicited extended abstract for EAGE "1st Conference on Geophysics for Infrastructure Planning Monitoring and BIM, 2019" (peer reviewed) **2019**
- 24. M. van Driel**, S. Ceylan, J. F. Clinton, D. Giardini, R. Weber, P. Lognonné, B. Banerdt, M. Drilleau, N. Murdoch, M. Panning, R. Garcia, D. Mimoun, M. Golombek, J. Tromp, M. Böse, I. Daubar, B. Kenda, A. Khan, L. Perrin, A. Spiga, M. S. Boxberg, M. Parath, M. Ditz, A. Lamert, T. Möller, S. Zhang, D. Ambrois, J. Chèze, F. Peix, H. Alemany, D. Mercerat, J. Balestra, A. Deschamp, C. Twardzik, L. Rolland, S. Mader*, L. Marten*, C. Schröer*, D. Becker*, T. Casademont*, F. Dethof*, D. Essing*, K. Grunert*, **C. Hadziioannou**, I. Hochfeld*, T. Kilchling*, F. Mehrkens*, P. Neumann*, R. Neurath*, R. Steinmann*, N. Trumplik*, P. Werdenbach-Jarklowski*, H. Hu, J. Li, Y. Zheng, E. Stutzmann, M. Schimmel, C. Hammer, B. Knapmeyer-Endrun, S. C. Stähler, N. Brinkman, S. Kedar, F. Euchner, B. Fernando, M. Tsekhmistrenko, K. Hosseini, C. Haindl, H. Godwin, A. Szenicer, T. Garth, and A. Allam
Preparing for InSight: Evaluation of the Blind Test for Martian Seismicity
Seismol. Res. Lett. **2019**
- 23. S. Stähler**, M. Panning, **C. Hadziioannou**, R.D. Lorenz, S. Vance, K. Klingbeil, S. Kedar
Seismic signal from waves on Titan's seas
Earth and Planetary Science Letters 520, 250–259 **2019**
- 22. B. Chow***, J. Wassermann, B. Schuberth, **C. Hadziioannou**, S. Donner and H. Igel
Love wave amplitude decay from rotational ground motions
Geophys. J. Int. 218(2) 13361347 **2019**
- 21. L. Gualtieri**, E. Stutzmann, C. Juretzek*, **C. Hadziioannou** and F. Arduin
Global scale analysis and modeling of primary microseisms,
Geophys. J. Int. 218(1) **2019**
- 20. D. Ziane*** and **C. Hadziioannou**
Multiple scattering as a possible mechanism for generating Love waves in the secondary microseism, *Geophys. J. Int.* 217 (2) **2019**
- 19. L. Krischer**, S. Donner, M. van Driel, **C. Hadziioannou**, M. Koymans, J. Leeman, F. Lindner, T. Megies, C. Nunn, A. Rijal, J. Salvermoser*, T. Taufiqurrahman, S. Wollherr, D. Vargas, J. Wassermann, F. Wölfl, C. Tape and H. Igel
Seismo-Live: An Educational Online Library of Jupyter Notebooks For Seismology,
Seismol. Res. Lett., 89 (6) **2018**

18. S. Hable, K. Sigloch, G. Barruol, S. C. Stähler, **C. Hadziioannou**
Clock errors in land and ocean bottom seismograms: High-accuracy estimation using multiple component noise cross-correlations, *Geophys. J. Int.*, 214(3) **2018**
17. F. Lindner, C. Weemstra, F. Walter, **C. Hadziioannou**
Towards Monitoring the englacial fracture state using virtual-reflector seismology, *Geophys. J. Int.*, 214(2) **2018**
16. C. Juretzek*, **C. Hadziioannou**,
Linking source region and ocean wave parameters with the observed primary microseismic noise, *Geophys. J. Int.*, 211(3), p1640-1654, **2017**
15. S. Donner, C.-J. Lin, **C. Hadziioannou**, A. Gebauer, F. Vernon, D. C. Agnew, H. Igel, U. Schreiber, J. Wassermann,
Comparing direct observation of strain, rotation, and translation with array estimates at Pinon Flat Observatory, California, *Seismol. Res. Letters* 88 (4) **2017**
14. J. Salvermoser*, **C. Hadziioannou**, S. Hable*, L. Krischer, B. Chow, C. Ramos, J. Wassermann, U. Schreiber, A. Gebauer, H. Igel,
An event database for rotational seismology, *Seismol. Res. Letters* 88 (3), **2017**
13. T. Tanimoto, C.-J. Lin, **C. Hadziioannou**, H. Igel, F. Vernon,
Estimate of Rayleigh-to-Love wave ratio in the secondary microseism by a small array at Piñon Flat Observatory, California, *Geophys. Res. Lett.*, 43, **2016**
12. C. Juretzek*, **C. Hadziioannou**,
Where do ocean microseisms come from? A study of Love-to-Rayleigh wave ratios, *J. Geophys. Res. Solid Earth*, 121, **2016**
11. A. Obermann, T. Planès, **C. Hadziioannou**, M. Campillo,
Lapse-time dependent coda wave depth sensitivity to local velocity perturbations in 3-D heterogeneous elastic media, *Geophys. J. Int.*, 207 (1), 59-66 **2016**
10. C. Wu, A. Delorey, F. Brenguier, **C. Hadziioannou**, E. Daub, P. Johnson,
Constraining depth range of S-wave velocity decrease after large earthquakes near Parkfield, California, *Geophys. Res. Lett.*, 43 **2016**
9. J. Wassermann, A. Wietek*, **C. Hadziioannou**, H. Igel,
Toward a Single Station Approach for Microzonation: Using Vertical Rotation Rate to Estimate Love-Wave Dispersion Curves and Direction Finding, *BSSA*, 106 (3) **2016**
8. T. Tanimoto, **C. Hadziioannou**, H. Igel, J. Wassermann, U. Schreiber, A. Gebauer, B. Chow,
Seasonal variations in the Rayleigh-to-Love wave ratio in the secondary microseism from co-located ring laser and seismograph, *J. Geophys. Res. Solid Earth*, 121, **2016**
7. J. Salvermoser*, **C. Hadziioannou**, S. Stähler,
Structural monitoring of a highway bridge using passive noise recordings from street traffic, *J. of the Acoust. Soc. Am.*, **138**, 3864 **2015**
6. T. Tanimoto, **C. Hadziioannou**, H. Igel, J. Wasserman, U. Schreiber, A. Gebauer,
Estimate of Rayleigh-to-Love wave ratio in the secondary microseism by co-located ring laser and seismograph, *Geophys. Res. Lett.*, 42 **2015**
5. **C. Hadziioannou**, P. Gaebler, U. Schreiber, J. Wassermann, H. Igel,
Examining ambient noise using co-located measurements of rotational and translational motion, *Journal of Seismology*, 16(4), 787–796, **2012**
4. **C. Hadziioannou**, E. Larose, A. Baig, P. Roux, M. Campillo,
Improving Temporal Resolution in Ambient Noise Monitoring of Seismic Speed, *J. Geophys. Res.* 116: B0730, **2011**
3. R. Weaver, **C. Hadziioannou**, E. Larose, M. Campillo,
On the precision of noise correlation interferometry, *Geophys. J. Int.* 185, 1384–92, **2011**
2. **C. Hadziioannou**, E. Larose, O. Coutant, P. Roux, M. Campillo,
Stability of monitoring weak changes in multiply scattering media with ambient noise correlation: Laboratory experiments, *J. of the Acoust. Soc. Am.* 125, 3688–95, **2009**
1. F. Brenguier, M. Campillo, **C. Hadziioannou**, N. Shapiro, R. Nadeau, E. Larose,
Postseismic relaxation along the San Andreas fault at Parkfield from continuous seismological observations, *Science* 321, 1478–81, **2008**

EDITED BOOKS & BOOK CHAPTERS	<p><i>S. Donner, H. Igel, C. Hadziioannou and the ROMY Group</i> Retrieval of the seismic moment tensor from joint measurements of translational and rotational ground motions, In: <i>"Moment Tensor Solutions - A Useful Tool for Seismotectonics"</i> (Springer; Editor: Sebastiano D'Amico), 2018</p> <p><i>A. Schmidt, C. Sens-Schönfelder, C. Hadziioannou, U. Wegler, E. Niederleitinger (Editors)</i>, Noise and Diffuse Wave Fields, Extended Abstracts of the Neustadt Workshop, <i>Mitteilungen Deutsche Geophysikalische Gesellschaft e.V., Sonderband IV/2012; 2012</i></p>
OUTREACH	<p><i>A. Morelli, C. Hadziioannou, C. Bean.</i> Time Dependent Seismology. <i>Impact 2017</i>, no. 1 p74-76, 2017</p>
FUNDING	<p>Emmy Noether Fellowship (DFG): approximately 860 k€ 2013 – 2018</p> <p>University of Hamburg investment fund CliSAP–CliCCS: 2017 75 k€ + 1 year PhD position</p> <p>Seed funding for assistance writing & coordinatig ITN proposal (10 k€) 2017</p> <p>Seed funding for assistance writing & coordinatig ITN proposal (10 k€) 2018</p> <p>University of Hamburg "Lehrlabor" for developing didacticly innovative course material 2018 – 2019 1 year PhD position + 4500€ for student assistants</p> <p>BMBF Early detection of earthquakes and their consequences: 2020 – 2023 "GIOTTO – Building vibrations: structure monitoring with innovative sensor concept" co-PI; 2 years Postdoc + funding for fieldwork</p>
TEACHING	<p>Supervision of 3 PhD students, 14 MSc projects.</p> <p>Seminar Seismologie, 2017-present MSc course at Universität Hamburg (2 SWS)</p> <p>Surface & Body wave Seismology, 2017-present MSc course at Universität Hamburg, lectures and exercises (2+1 SWS)</p> <p>Seismologie, 2017-present BSc course (6. Sem) at Universität Hamburg, lectures and exercises (2+2 SWS)</p> <p>Seismic noise spectra and polarisation, 2015 TIDES training school on seismic data, Bertinoro, Italy</p> <p>Geophysikalische Datenanalyse, 2015 BSc course at LMU München, lectures and exercises (2+1 SWS)</p> <p>Geophysical Data Acquisition and Analysis, 2013 – 2016 MSc course at LMU München, lectures and exercises (2+2 SWS)</p> <p>Tutorial on Ambient noise correlations, 2013 QUEST Workshop</p> <p>Introduction to Seismology; Signal Processing, 2012 Special course at ROSE school, Pavia, Italy</p> <p>Applied Geophysics, 2011 & 2012 Exercises for BSc course at LMU München (in German, 2 SWS)</p>
TOOLS	<p>Rotational Seismology Event Database launched 2017 Online access to more than 17,000 Earthquake waveforms and processed plots from signals recorded simultaneously by the Wettzell ring laser and a nearby seismometer.</p> <p>Seismo-Live (http://seismo-live.org/) Contribution of teaching notebooks, e.g. "Signal Processing", "Ambient Seismic Noise", "Rotational Seismology"</p>
INVITED PRESENTATIONS	<p>Lecturer at Cargese Summer School "Ambient Noise Imaging and Monitoring" 2019</p> <p>Keynote at the EAGE "1st Conference on Geophysics for Infrastructure Planning Monitoring and BIM"</p> <p>Invited Talk at the University of Edinburgh, UK</p> <p>Invited Talk at University of Oxford, UK</p> <p>Invited Talk at Christian-Albrechts-Universität Kiel, Germany 2018</p> <p>Invited Talk at Ruhr-Universität Bochum, Germany</p> <p>Lecturer at Cargese Summer School "Ambient Noise Imaging and Monitoring" 2017</p>

Invited Talk at the University of Hamburg, Institute of Soil Science
Trainer at the TIDES 2nd training school, Sesimbra, Portugal 2016
Invited Talk at WAVES workshop "Advances in Imaging", Delft, the Netherlands
Trainer at the TIDES 1st training school, Bertinoro, Italy 2015
Invited Talk at the Swiss Seismological Service, ETH, Zurich, Switzerland
Invited Talk at Westfälische Wilhelms-Universität Münster, Germany
Invited Talk at Utrecht University, Utrecht, the Netherlands 2014
Invited Talk at Géoazur, Sophia-Antipolis, France 2013
Invited Talk at ETH Zurich, Switzerland
Invited Talk at Universität Leipzig, Germany 2011
Invited Talk at Quest workshop, Sardinia 2010

LANGUAGES

Written & spoken fluently: English, Dutch, French
Conversational: German
Basic knowledge: Greek