

Judith Confal

Post-Doctoral Researcher



I am a geophysicist and seismologist with a broad experience from computational seismology and numerical models of the upper mantle to applied Geoscience in the shallower parts of the earth. In recent years my research area was surrounding the topic of seismic anisotropy in the upper mantle and its impact on seismic waves.

Education

2016-2020	PhD student, Istanbul Technical University, Turkey Thesis Title: Investigation of Mantle Kinematics beneath Turkey and adjacent Regions based on Seismological and Numerical Modelling with Prof. Dr. T. Taymaz
2014-2015	ERASMUS scholarship at Istanbul Technical University, Turkey
2012-2015	Geotechnology (MSc.), Technical University Berlin, Germany Exploring Lithospheric Kinematics beneath Hellenic-Subduction Zone by using Shear-Wave Splitting Analyses with Prof. Dr. U. Yaramanci, Assoc. Prof. Dr. Tuna Eken
2009-2013	Geotechnology (BSc.), TU Berlin, Germany Thesis Title: Geophysikalische Testmessungen auf der Kalisalzhalde in Bleicherode, Thüringen with Prof. Dr. F. Börner, Dr. Carsten Rücker

Employment and Project History

Dec.2020- present	PostDoctoral researcher at INGV, Bologna, Italy Project: Newton - New Window into Earth's interior (ERC StG 758199)
February 2018	Research residency at University of Minnesota with Assoc. Prof. Dr. M. Bezada, USA Project: Correcting P-wave Tomography Inversions for Anisotropy
July/August 2016	Research residency at University of Padua with Assoc. Prof. Dr. M. Faccenda, Italy Project: Numerical modelling of mantle flow and anisotropy
July 2014	Seismic Measurements, IMUSH-Project, Rice University, USA Project: Exploring the Magma Chamber underneath Mt. St. Helen
2012-2014	Student research assistant, TU Berlin, Germany Geophysical and Petrophysical measurements on a salt waste tip in Thuringia
September 2012	3D-Seismic Measurements for CCS Storage, GFZ Potsdam, Germany
July 2012	Geoelectrical Measurements for Umweltbüro GmbH Vogtland, Germany

Fellowships and Grants

2017-2018	DAAD Scholarship for PhD students, reference number 91671753
2016-2017	PhD project funded by TÜBİTAK, project no: ÇAYDAG-115Y248

Published Papers

- Confal, J. M., Bezada, M., Eken, T., Faccenda, M., Saygin, E., Taymaz, T. (2020) The anisotropic component in P-wave tomography images of the Eastern Mediterranean and Anatolia. *Journal of Geophysical Research, Solid Earth*, 125, 8. <https://doi.org/10.1016/j.pepi.2016.10.012>
- Confal, J. M., Faccenda, M., Eken, T., Taymaz, T. (2018). Numerical simulation of 3-D mantle flow evolution in subduction zone environments in relation to seismic anisotropy beneath the eastern Mediterranean region. *Earth and Planetary Science Letters*, 497, 50-61. <https://doi.org/10.1016/j.epsl.2018.06.005>
- Confal, J. M., Eken, T., Tilmann, F., Yolsal-Cevikbilen, S., Cubuk-Sabuncu, Y., Saygin, E., Taymaz, T. (2016). Investigation of mantle kinematics beneath the Hellenic-subduction zone with teleseismic direct shear waves. *Physics of the Earth and Planetary Interiors*, 261, 141-151. <https://doi.org/10.1016/j.pepi.2016.10.012>
- Duennbier, K., Confal, J., Schicht, T., Thiemann, K., & Boerner, F. (2014, September). Using Electrical and Seismic Tomography to Detect Weak Points on a Potash Mining in Central Germany. In *Near Surface Geoscience 2014-20th European Meeting of Environmental and Engineering Geophysics*.