Dr Augustin Marignier CV

Email: augustin.marignier.14@ucl.ac.uk
Address: Department of Earth Sciences, University College London, London, WC1E 6BT, UK

Education

2022 PhD Data Intensive Science, University College London
From Dark Matter to the Earth's Deep Interior: There and Back Again
Supervised by Prof Ana Ferreira and Prof Thomas Kitching
Submitted 30/9/22, Defended 6/12/22

2018 MSci Geophysics, University College London
First Class Honours
Rayleigh wave ellipticity inversion for crustal velocity structure
Supervised by Prof Ana Ferreira

Professional History

Jan 23 - Dec 23	PDRA Seismology, Research School of Earth Sciences, ANU
Sep 22 - Dec 22	PDRA Seismology, Department of Earth Sciences, UCL
Jun 22	Scientist, Land seismometer deployment, Azores
Jun 21 - Aug 21	Scientist, UPFLOW Ocean-bottom Seismometer deployment, Atlantic Ocean
Oct 19 - May 20	Machine Learning Intern, KageNova Ltd.
Oct 18 - Sep 22	PhD Student, Centre for Doctoral Training in Data Intensive Science, UCL

Publications

- W. Sturgeon, A. M. G. Ferreira, L. Schardong, **A. Marignier** (2022). Crustal structure of the Western U.S. from Rayleigh and Love wave amplification data. *JGR: Solid Earth, submitted*
- **A. Marignier**, J. D. McEwen, A. M. G. Ferreira, T. D. Kitching (2022). Posterior sampling for inverse imaging problems on the sphere in seismology and cosmology. *RASTI, under review*
- O. J. Cobb, C. G. R. Wallis, A. N. Mavor-Parker, **A. Marignier**, M. A. Price, M. d'Avezac, J. D. McEwen (2021). Efficient Generalized Spherical CNNs. *ICLR*
- **A. Marignier**, A. M. G. Ferreira, T. D. Kitching (2020). The Probability of Mantle Plumes in Global Tomographic Models. *G3*
- A. M. G. Ferreira, **A. Marignier**, J. Attanyake, M. Frietsch, A. Berbellini (2020). Crustal structure of the Azores Archipelago from Rayleigh wave ellipticity data. *GJI*

Teaching

2021 - 2022	Machine Learning with Big Data, UCL
2019 - 2021	Seismology II, UCL
2019 - 2021	Field Geophysics, UCL
2017 - 2021	MATLAB, UCL

Talks

- Proximal Markov chain Monte Carlo: Towards building a sparse Earth model
  SSA Virtual Tomography Sessions. 02/02/21
- Proximal Markov Chain Monte Carlo: Towards Building a Sparse Earth Model
  AGU Fall Meeting 2021 - Winner of the AGU Seismology Section Outstanding Student Presentation Award**. 13/12/21
- Cosmological mass-mapping with trans-dimensional trees
  3rd IMA Conference on Inverse Problems from Theory to Application. 04/05/22

Journal Peer Reviews

- Geophysical Journal International
- Journal of Geophysical Research - Solid Earth
- Physics of the Earth and Planetary Interiors