Éric Beucler

September 22, 2024

Birth date: December 30, 1973

Married, two beautiful children

Position: Full professor

Institute: Earth Sciences Department (STU), UFR des sciences et techniques, Nantes University

Research unit: Laboratory of Planetology and Geodynamics (LPG), UMR CNRS-6112

https://lpg-umr6112.fr/beucler-e eric.beucler@univ-nantes.fr

Abstract

University professor specialising in terrestrial and Martian seismology. Development of inverse methods 1) for imaging planet interiors - seismic tomography at different scales - and 2) for the detection/localisation of low magnitude earthquakes (intraplate). Involved in the French seismological network (RESIF), deployment of broadand seismometers, development of new statistical methods for the continuous seismic signal, seismicity of the Armorican Massif. In the framework of the NASA InSight mission (2018-2022), Co-I of SEIS instrument, seismologist on duty and member of the scientific team. Head of Observatory of Sciences of the Universe Nantes Atlantique since 2021.

Education, honnors

1998	Postgraduate degree in Internal Geophysics (Institut de physique du globe de Paris/University Paris 7)
2002	PhD in Seismology (IPGP/University Paris 7)
2004	National prize of Geophysics (CNFGG)
2017	Habilitation à diriger des recherches, Université de Nantes (French diploma)
2020	InSight Science Operations and Enhancement Team NASA award

Special Skills

sciences: seismology, signal processing, numerical methods, geophysics, applied mathematics,

languages: French (native), English (fluent), Madarin Chinese (some notions),

computing: linux, ForTran, bash, *Seismic Analysis Code*, *Generic Mapping Tool*, LaTeX, python, html.

Work experience

1998-2001	PhD, Department of Seismology, Institut de physique du globe de Paris
2001-2002	Post-doctoral researcher, Department of Seismology, Institut de physique du globe de Paris
2002-2003	Post-doctoral researcher, Earth, Atmosphere and Ocean Department, École normale supérieure de Paris
2003-2004	Post-doctoral researcher, Department of Earth Sciences, Oxford University
2004-2018	Assistant Professor, Nantes University
2018- ...	Full Professor, Nantes University

Publications

[1] **É. Beucler**, S. Chevrot and J.-P. Montagner (1999), "The Snake River Plain Experiment revisited. Relationships between a Farallon plate fragment and the transition zone", *Geophys. Res. Lett.*, vol. 26, no. 17, pp. 2673–2676, doi:10.1029/1999GL008345.

[2] **É. Beucler**, É. Stutzmann and J.-P. Montagner (2003), "Surface-wave higher mode phase velocity measurements using a roller coaster type algorithm", *Geophys. J. Int.*, vol. 155, pp. 289–307, doi:10.1046/j.1365-246X.2003.02041.x.

[3] B. Bukchin, T. Yanovskaya, J.-P. Montagner, A. Mostinskiy and **É. Beucler** (2006), "Surface wave focusing effects: Numerical modeling and statistical observations", *Phys. of the Earth and Planet. Int.*, vol. 155, no. 3, pp. 191–200, doi:10.1016/j.pepi.2005.10.010.

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[5] **É. Beucler** and J.-P. Montagner (2006), "Computation of Large Anisotropic Seismic Heterogeneities (CLASH)", *Geophys. J. Int.*, vol. 165, no. 2, pp. 447–468, doi:10.1111/j.1365-246X.2005.02813.x.

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[9] M. Drilleau, **É. Beucler**, A. Mocquet, O. Verhoeven, G. Moebs, G. Burgos, J.-P. Montagner and P. Vacher (2013), "A Bayesian approach to infer radial models of temperature and anisotropy in the transition zone from surface wave dispersion curves", *Geophys. J. Int.*, vol. 195, pp. 1165–1183, doi:10.1093/gji/ggt284.

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E. Bozdag, J. Clinton, I. Daubar, P. Delage, N. Fuji, M. Golombek, M. Grott, A. Horleston, K. Hurst, J. Irving, A. Jacob, J. Knollenberg, S. Krasner, C. Krause, R. Lorenz, C. Michaut, R. Myhill, T. Nissen-Meyer, J. ten Pierick, A.-C. Plesa, C. Quantin-Nataf, J. Robertsson, L. Rochas, M. Schimmel, S. Smrekar, T. Spohn, N. Teanby, J. Tromp, J. Vallade, N. Verdier, C. Vrettos, R. Weber, D. Banfield, E. Barrett, M. Bierwirth, S. Calcutt, N. Compaire, C. L. Johnson, D. Mance, F. Euchner, L. Kerjean, G. Mainsant, A. Mocquet, J. A. Rodriguez Manfredi, G. Pont, P. Laudet, T. Nebut, S. de Raucourt, O. Robert, C. T. Russell, A. Sylvestre-Baron, S. Tillier, T. Warren, M. Wieczorek, C. Yana and P. Zweifel (2020), "Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data", *Nature Geoscience*, vol. 13, no. 3, pp. 213–220, doi:10.1038/s41561-020-0536-y.

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