

Cyril JOURNEAU
Phone: (+33) 6 10 89 84 60
Email: cyril.journeau@univ-grenoble-alpes.fr

PhD

2019 – 2022 [INSTITUT DES SCIENCES DE LA TERRE \(ISTerre\)](#) AND [OBSERVATOIRE VOLCANOLOGIQUE DU PITON DE LA FOURNAISE \(OVPF\)](#) , Grenoble and La Réunion respectively, France.
Three years of **PhD in Geophysics** supervised by [Dr. N.Shapiro](#) and [Dr. A.Peltier](#)
Topic: "Analysis of magma transport processes using seismic and geodetic networks, application to Piton de la Fournaise and Klyuchevskoy Volcanic Group"

Education

2018 – 2019 [INSTITUT DE PHYSIQUE DU GLOBE DE PARIS \(IPGP\)](#), France.
Master of Geophysics - Solid Earth obtained with honors.

2017 – 2018 [ÉCOLE NORMALE SUPÉRIEURE \(ENS\)](#)
[INSTITUT DE PHYSIQUE DU GLOBE DE PARIS](#), France.
Successfully completed the first year of **Master of Geosciences** (major in geology - geophysics).

2016 – 2017 [ÉCOLE NORMALE SUPÉRIEURE \(ENS\)](#)
[UNIVERSITÉ PARIS 6 UPMC](#), France.
Licence obtained with honors (equivalent to a **BS in Geosciences**).

Field work and Research experience

2021 [OBSERVATOIRE VOLCANOLOGIQUE DU PITON DE LA FOURNAISE \(OVPF\)](#), La Réunion, France.
Field work on Piton de la Fournaise volcano including installation of seismic station and participation to GNSS campaign.

2019
(5 months) [INSTITUT DE PHYSIQUE DU GLOBE DE PARIS \(IPGP\)](#), Paris, France.
Research internship in volcano seismology supervised by [Dr. N.Shapiro](#)
Topic : "Co-eruptive tremors analysis at Piton de la Fournaise using network-based seismic methods" .

2018
(5 months) [GNS SCIENCE](#), Lower Hutt, New Zealand.
Research internship in geophysics supervised by [Dr. S.Hreinsdottir](#) and [Dr. I.Hamling](#)
Topic : "Crustal deformation using GPS and InSAR analysis at Taupo volcano, New Zealand"
Participation during 3 weeks to a GPS campaign survey in the South Island of New Zealand.

2017
(1 month) [ÉCOLE NORMALE SUPÉRIEURE \(ENS\)](#), Paris, France.
Research internship in geodesy supervised by [Dr. P.Brilot](#)
Topic : "Validation of the TANDEM-X digital elevation model from kinematic GPS data in the Rift area of Corinth (Greece)".

Publications

- 2020-06-27, Journeau, C., Shapiro, N. M., Seydoux, L., Soubestre, J., Ferrazzini, V., and Peltier, A. (2020). Detection, classification, and location of seismovolcanic signals with multicomponent seismic data: Example from the Piton de la Fournaise volcano (La Réunion, France). *Journal of Geophysical Research: Solid Earth*, 125, e2019JB019333. <https://doi.org/10.1029/2019JB019333>.
- 2021-12-01, Article accepted for publication in *Science Advances*, Seismic tremor reveals active trans-crustal magmatic system beneath Kamchatka volcanoes.
- 2021-12-01, Article in preparation, Tracking changes in the co-eruptive tremor characteristics and associated magma degassing processes, application to Piton de la Fournaise, La Réunion, France .

Scientific oral presentations

- 2019-10-22, SEISMAZE Kick-off meeting (ISTerre), Piton de la Fournaise tremors.
- 2019-12-05, OVPF seminar, Eruptive tremors analysis using continuous seismologic data at the Piton de la Fournaise volcano.
- 2020-11-10, KISS symposium (online), Distribution of sources of seismo-volcanic tremors imaged from the KISS data.

- 2020-11-12, SEISMAZE workshop (online), Sources of seismo-volcanic tremors in Kamchatka.
- 2020-12-07, AGU Fall Meeting (online), Geometry and dynamics of the magmatic feeding system beneath the Klyuchevskoy Volcanic Group (Kamchatka, Russia) revealed by detailed study of seismovolcanic tremor sources.
- 2021-03-25, CovSeisNet package presentation to OVS (Volcanological and Seismological Observatories, IGP) (online), CovSeisNet: a covariance (correlation) based analysis of data from Seismic Networks.
- 2021-04-22, SEISMAZE workshop (online), Magma transport in deep roots of volcano-plumbing systems and low-frequency seismicity generation.
- 2021-04-28, EGU General Assembly (online), Imaging seismovolcanic tremor sources distribution with seismic network-based methods reveals fluid pressure pathways within Klyuchevskoy Volcanic Group magmatic system.
- 2021-05-07, ISTerre Waves Team Meeting (online), Distribution of seismo-volcanic tremors illuminates a transcrustal magmatic system beneath Kamchatka volcanoes activated by fast pressure transients.
- 2021-05-19, SEISMAZE workshop (online), Seismovolcanic tremor and Gas piston events at Piton de la Fournaise volcano.
- 2021-10-06, Seminar at University of La Réunion, Eruptive dynamism of the Piton de la Fournaise from observations of seismic and geodetic networks.

Research interests

- Magmatic system, volcanic activity and related geophysical signals.
- Volcano seismology and geodesy.
- Big data, dense networks of instruments.

Languages

French:	Mother tongue.
English:	Fluent.
Spanish:	Bases.

IT skills

Linux (Bash), Python, Matlab, L^AT_EX, Microsoft Word, Excel, Powerpoint.