#### Address

Rue du Mont Cenis, 125 75018, Paris, France

# ClémentThorey

#### Data scientist

# Tel & Skype

+33 695 764 726 thorey.clement

# **Experience**

10/12 - Now **Teaching assistant** 

Université Paris Diderot - Paris, France.

Mathematics - Linear algebra, ODP, EDP, Fourrier series, Fourrier transform Physics - Mechanics, Experimental Physics (undergraduate level) Informatics - C (graduate level), Python (undergraduate level).

#### Mail

clement.thorey@ gmail.com thorey@ ipgp.fr

10/12 - 11/15 PhD candidate

Insitut de Physique du Globe, Paris, France.

Research interest: Intrusive magmatism on terrestrial planets. Research Method: Numerical simulation / Data analysis.

### Web & Git

github.com/cthorey cthorey.github.io scholar.google.fr/cthorey kaggle.com/cthorey 02/11 - 07/11 Research assistant

Faculty of Science, University of Colima, Mexico.

Research interest: Active volcano monitoring.

Research method: Seismic activity, thermal imaging, CO2 release and deformation mapping (GPS). Data preprocessing and analysis.

05/10 - 08/10 Research assistant

Benjamin Levich Institut, New York, USA.

Research interest: Investigation of the periodic jamming and unjamming of dense suspensions in a particular geometry.

Research method: Experiments, Particle tracking (PIV).

# Python library pdsimage

## **Programming**

# **Education**



2012 - 2015 PhD in Geophysics (Planetary Sciences) Institut de Physique du Globe, Paris.

Thesis title: Dynamics of shallow magmatic intrusions

Advisor: Chloé Michaut and Mark Wieczorek

Mention: Highest distinction.

2011 - 2012 Master's Degree in Earth Science Institut de Physique du Globe, Paris, France.

Main subjects: Volcanology, Seismology, Geophysical Fluid Dynamics.

Mention: Honors.

2009 - 2011 Master's Degree in Theoretical Physics and Chemistry ENS Lyon, France.

Courses cover the entire spectrum of physics and chemistry.

Mention: Honors.

2008 - 2009 Bachelor's Degree in in Physics and Chemistry.

Main subjects: Physics and chemistry such as quantum physics and statistical physics. Mathematics and computer science. *Highly selective degree*.

Mention: Accepted

2006-2008 Bachelor's Degree MPSI.

Université Lille 1, Lille, France.

ENS Lyon, France.

Main subjects: Mathematics, Physics and Computer Science

Mention: Honors.



#### **Places Lived**



#### Languages French \*\*\*\* English \*\*\*\* Spanish \*\*\*

## Personal Skills Peer-Reviewed Articles

- Thorey, C., Michaut, C., 2015. Elastic-plated gravity current with temperature-dependent viscosity. Journal of Fluid Mechaniscs (JFM)
- Thorey, C., Michaut, C., Wieczorek, M.A., 2015. Gravitational signatures of lunar floor-fractured craters (FFC). Earth and Planetary Science Letters 1-40. doi:10.1016/j.epsl.2015.04.021
- Thorey, C., Michaut, C., 2014. A model for the dynamics of crater-centered intrusion: Application to lunar floor-fractured craters. J. Geophys. Res. Planets 119, 286–312. doi:10.1002/2013je004467
- · Michaut, C., Baratoux, D., Thorey, C., 2013. Magmatic intrusions and deglaciation at mid-latitude in the northern plains of Mars. Icarus 225, 602-613. doi:10.1016/j.icarus.2013.04.015

# Communications in major scientific conference

- C. Michaut and Thorey, C., Magmatism on the Moon, EGU 2016, Talk
- Thorey, C., Floor-Fractured Craters through Machine Learning Methods, AGU Fall meeting 2015, Poster
- Thorey, C. and C. Michaut, A General Model for Shallow Magmatic Intrus, AGU Fall meeting 2015, Poster
- Thorey, C., Detection of lunar floor-fractured craters using machine learning methods, EPSC 2015, Poster
- C. Michaut and Thorey, C., Magmatic intrusions in the lunar crust ,EPSC 2015, Talk
- Thorey, C. and C. Michaut, Effect of a temperature-dependent viscosity on the spreading of laccoliths, AGU Fall meeting 2014, Poster
- Thorey, C., C. Michaut, M. Wieczorek, Gravitational signatures of lunar floor fractured craters, GRAIL science meeting, may 2014, Boulder, Colorado, USA, Talk
- Thorey, C., C. Michaut, M. Wieczorek, Gravitational signatures of lunar floor fractured craters, LPI, Contribution No. 2225, 45th LPSC, held March 2014 in The Woodlands, TX, USA, Poster
- Thorey, C. and Michaut C., Thermal evolution of a magmatic intrusion, AGU Fall meeting 2013, Poster
- Thorey, C. and Michaut C., Floor-fractured craters on the Moon: an evidence of past intrusive magmatism, 44th Lunar and Planetary Science Conference, held March, 2013 in The Woodlands, Texas. LPI Contribution No. 1508, 2013, Talk.
- Thorey, C. and Michaut C., Floor-fractured craters on the Moon: an evidence of past intrusive magmatic activity, AGU Fall meeting 2012, Poster.
- Thorey, C., November 2014, Gravitational signatures of lunar floor fractured craters, Workshop Structure and Dynamics of Earth-like Planets, Collège de France, Poster
- Thorey, C., November 2014, Gravitational signatures of lunar floor fractured craters, Collogue PNP, Poster
- Thorey, C., February 2014, Les cratères au sol fracturé: Témoins d'un magmatisme intrusif passé sur la Lune. UnivEarths, Talk
- Thorey, C., March 2012, Formation of lunar floor-fractured craters, Univ. de Toulouse , Poster.

# **Other Info**

For the Italian job market:

Si autorizza il trattamento delle informazioni contenute nel curriculum in conformità alle disposizioni previste dal d.lgs. 196/2003. Si dichiara altresì di essere consapevole che, in caso di dichiarazioni non veritiere, si è passibili di sanzioni penali ai sensi del DPR 445/00 oltre alla revoca dei benefici eventualmente percepiti.

January 14th, 2014

Carmine Benedetto