

# Adrien Guérin

*Postdoc at the MSC laboratory,  
Paris-Diderot University*

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## Professional experiences

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- Sept. 2017–present **Postdoctorate on erosion by dissolution** in the Matière et Systèmes Complexes (MSC) laboratory, Paris-Diderot University, France
- May–July 2017 **Teacher** in hydrogeology at Master's level at Andrés Bello University, Viña del Mar, Chile
- Sept.–Dec. 2016 **Visiting postdoc** in Raymond Goldstein's group, at the Department of Applied Mathematics and Theoretical Physics (DAMTP), University of Cambridge
- Jan. 2016–March 2017 **Postdoctorate on fog collection** in the Bioengineering Laboratory, Universidad Adolfo Ibañez, Viña del Mar, Chile
- 2012–2015 **Ph.D. on groundwater flow** in the Geological Fluid Dynamics Laboratory, Institut de Physique du Globe de Paris
- 2012–2015 **Teaching assistant** in physics in the Earth and Planetary Sciences Department, Denis Diderot University, Paris
- May–July 2010 **Research Internship on deltas formation** in the Department of Earth & Environmental Sciences, University of Pennsylvania, Philadelphia, PA
- June–July 2009 **Research Internship on submarine barchan dunes** at the Institut de Physique de Rennes

## Education

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- 2015 **Ph.D.** in Earth Sciences at the IPG Paris
- 2012 **Master's degree** in Earth Sciences at the École Normale Supérieure, Lyon
- 2010 **Bachelor's degree** in Physics at the École Normale Supérieure, Lyon
- 2005–2008 **Classe préparatoire** in Physics at the Lycée Châteaubriand, Rennes

## Publications & Awards

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### Articles

- ▷ A. Guérin, S. Gravelle, J. Dumais, Forces behind plant cell division, *Proceedings of the National Academy of Sciences*, 113(2), 8891-8893
- ▷ A. Guérin, O. Devauchelle, E. Lajeunesse, Response of a laboratory aquifer to rainfall, *J. Fluid Mech.*, 759, R1 doi:10.1017/jfm.2014.590
- ▷ F. Falcini, A. Piliouras, R. Garra, A. Guerin, D. J. Jerolmack, J. Rowland & C. Paola, Hydrodynamic and suspended sediment controls on river mouth morphology, *J. Geophysical Research: Earth Surface*, 119, 1-11, (2014)

## Invited communications

- ▷ Formation de crues rapides par des écoulements en aquifère non confiné, A. Guérin, O. Devauchelle, E. Lajeunesse, *Ladhyx, Université Paris Saclay* (Laboratory seminar, 2016)
- ▷ Generation of quick flood events by a groundwater flow, A. Guérin, O. Devauchelle, E. Lajeunesse, *BP Institute, University of Cambridge* (Laboratory seminar, 2016)
- ▷ Dynamique de l'écoulement dans un aquifère non confiné, A. Guérin, O. Devauchelle, E. Lajeunesse, *Laboratoire de Physique de la Matière Condensée, Nice* (Laboratory seminar, 2015)
- ▷ Relation nappe-rivière et dynamique des écoulements souterrains, A. Guérin, O. Devauchelle, E. Lajeunesse, *Institut Jean le Rond D'alembert, UPMC, Paris* (Laboratory seminar, 2014)

## Awards

- ▷ Best student presentation at the 2015 conference of FlowTrans, an international group meeting on flow in porous media.

## Languages & Skills

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- ▷ French: mother tongue
- ▷ English, Spanish, German: fluent
- ▷ Italian: beginner
- ▷ Programming: advanced Python, html, L<sup>A</sup>T<sub>E</sub>X, FreeCAD, LibreCAD