# Guillaume GEOFFROY Ph.D. in mathematics

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Personal data

Guillaume Jean-Jacques Geoffroy, born in 1992 in Le Chesnay (Yvelines, France), french nationality.

Current position

Since 09/2019 **Post-doc** (assegno di ricerca) at the departement of computer science and engineering of the university of Bologna (research project DIAPASoN – Differential Program Semantics).

Past positions

2018 – 2019 **Visiting assistant professor (ATER)** at I2M (Institut de Mathématiques de Marseille).

Education

- 2015 2019 **Ph.D. in mathematics**, Aix-Marseille University. *Classical realizability: new tools and applications*. Advisor: Laurent Regnier. Defended on 29 March 2019.
- 2011 2015 **École Normale Supérieure diploma**, École Normale Supérieure, Paris. Major: mathematics, minor: computer science.
  - 2014 Research internship, Universidad de la República, Montevideo (Uruguay). Classical realizability in set theory: an example with the model of threads. Advisor: Alexandre Miquel.
- 2013 2014 Research Master (M2): Mathematical Logic and Foundations of Computer Science (LMFI), Paris Diderot University, École Normale Supérieure, Paris. With honours (Mention très bien).
- 2011 2013 University degree (L3 and M1) in mathematics, École Normale Supérieure, Paris.
- 2009 2011 CPGE (2-year program preparing for entry exams to engineering schools), Lycée Louis le Grand, Paris. Admitted to École Normale Supérieure, group MPI, rank 23rd.
  - 2009 High-school diploma (baccalauréat général), scientific option, Lycée Évariste de Parny, Saint Paul (La Réunion, France). With honours (mention très bien, avec les félicitations du jury).

Research

## Peer-reviewed publications

07/2018 Guillaume Geoffroy. *Classical realizability as a classifier for nondeterminism*. LICS 2018: Thirty-First Annual ACM / IEEE Symposium on Logic in Computer Science.

#### Ph.D. thesis

03/2019 Guillaume Geoffroy. *Classical realizability: new tools and applications.* Ph.D. thesis.

### Publications in preparation

Laura Fontanella, Guillaume Geoffroy. *Realizability models of ZF with weak forms of choice.* 

#### Talks

- 09/2018 Connecting degrees of parallelism and Boolean algebras through classical realizability, CHoCoLa.
- 07/2018 Classical realizability as a classifier for nondeterminism, LICS 2018.
- 06/2018 Clasical realizability and nondeterminism, Realizability in Marseille.
  - 2016 Weekly workshop on classical realizability in the LDP (*Logique de la programmation*) team, I2M. Main speaker.

## Scientific meetings

06/2018 Realizability in Marseille, co-organizer (with Laura Fontanella).

Science popularization

Co-founder and vice-president of Pi Day association (www.piday.fr).

- 2015 2017 President of Pi Day association.
- 14 March 2017 Co-author (with Joël Cohen) of the mathematical musical *From Marseille to Vegas* and co-organizer of the Pi Tour: three performances of the musical in Paris (théâtre des Variétés), Lyon (le Transbordeur) and Marseille (le Silo), accompanied by short scientific talks (attendance: 2000). Videos: http://www.piday.fr/extraits-video-2017/.
- 14 March 2016 Co-author of the mathematical musical *Les* π *travaux d'Archimède* and coorganizer of Pi Day in Marseille: one performance of the musical, accompanied by short scientific talks (attendance: 700). The association received the 2016 d'Alembert Award of the French Mathematical Society for this action.

#### Teaching

- 2018 2019 Visiting assistant professor (ATER) at Aix-Marseille University (192h per year). Linear algebra; methodology; mathematical reasoning (1st year university L1); C and systems programming (1st year university L1); research initiation workshops (high school).
- 2015 2018 **Teaching assistant** (chargé de mission d'enseignement) at Aix-Marseille University (64h per year). Introductory analysis; algebra and geometry (1st year university L1); C programming (1st and 2nd year university L1 & L2); logic and computability (graduate course M2); research initiation workshops (high school).

Languages

French (native), English, Spanish, Italian.

2017 – 2018 Oranizer of *Café des langues de Luminy*, daily multilingual student language exchange group.