

Paul-Marie Grollemund

Research Associate

Position

- 09/18-... **Research Associate**, *Department of Mathematics, Imperial College London.*
Statistics and Pathogen Phylodynamics
- 09/17-08/18 **ATER**, *IMAG, University of Montpellier.*
- 07/14-09/14 **Statistician**, *Lepse, Montpellier SupAgro.*
Data preprocessing

Education

- 2014-2017 **PhD Thesis in Statistics**, *IMAG, University of Montpellier.*
under the supervision of Christophe Abraham (Mistea, Montpellier SupAgro), Pierre Pudlo (I2M, Aix-Marseille University) and Meili Baragatti (Mistea, Montpellier SupAgro).
Title: Bayesian Linear Regression on Functional Data.
Thesis defended the November 22th 2017, Manuscript (abstract) here.
Before the commission:
- **Christophe Abraham**, *Montpellier SupAgro*, PhD Director
 - **Meili Baragatti**, *Montpellier SupAgro*, Co-supervisor
 - **Pierre Druilhet**, *University Blaise Pascal*, Examiner
 - **André Mas**, *University of Montpellier*, Member of the commission
 - **Éric Parent**, *AgroParisTech*, President of the jury
 - **Anne Philippe**, *University of Nantes*, Member of the commission
 - **Pierre Pudlo**, *Aix-Marseille University*, PhD Co-director
 - **Judith Rousseau**, *Université Paris Dauphine*, Examiner
- 2011 - 2014 **Master**, *University of Montpellier.*
Mathematics, Statistics and Applications
- 2008 - 2011 **Bachelor**, *University of Montpellier.*
Mathematics

Internship

- 02/14-06/14 **Master Thesis**, *Mistea, Montpellier SupAgro.*
FLIRTI or a Bayesian Alternative.
Supervised by Christophe Abraham and Meili Baragatti
- 02/13-05/13 **Master Internship**, *IMAG, University of Montpellier.*
On the impact of the G-quadruplex pattern on the DNA replication.
Supervised by Jean-Michel Marin and Jean-Marc Lemaitre.

Research Interests

Bayesian Statistics ★ MCMC methods ★ Regression Model ★ Functional Data ★ high dimensional statistics ★ Sparsity ★ Elicitation of prior knowledge ★ Posterior contraction ★ bayesian nonparametric ★ HIV transmission

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🌐 <https://pmgrollemund.github.io/homepage/index.html>

Teaching

- 2017-2018 **Lecturer and Teaching Assistant**, *University of Montpellier*.
Medical School, Pharmacy School and Faculty of Sciences
(192h)
- 2015-2017 **Teaching Assistant**, *Montpellier SupAgro*.
(64h per year)

Publications and main communications

Accepted Article

- Grollemund P.M., Abraham C., Pudlo P., Baragatti M. (2018) *Bayesian Functional Linear Regression with Sparse Step Functions*, *Bayesian Analysis*. Available here .
- Baragatti M., Grollemund P.M., Montpied P., Dupouey J.L., Gravier J., Murat C., Le Tacon F. (2019) *Influence of annual climatic variations, climate changes, and sociological factors on the production of the Périgord black truffle (Tuber melanosporum Vittad.) from 1903–1904 to 1988–1989 in the Vaucluse (France)*, *Mycorrhiza*. Available here .

Submitted Article

- Grollemund P.M., Abraham C., Pudlo P., Baragatti M. (2018) *Bayesian Approach using Expert's Opinion: Impact of Rainfall on Production of Périgord Black Truffles*.

Manuscript in Preparation

- Abraham, C. and Grollemund P.M. (2019) *Posterior Consistency of Bayesian Functional Linear Regression model*.

Code R

- Implementation of the Bliss method available on GitHub here (CRAN: submission process).

Main talks

- Bayesian Modelling and Analysis of Big Data, Marseille, November 2018.
- 2018 ISBA World Meeting , Edinburgh, UK, June 2018.
- 50th Days of Statistics (SFDS), Saclay, France, May 2018.
- Team seminar, IRMAR, Rennes, France, April 2018.
- Network RIS, Paris, France, March 2018.
- Team seminar, LAREMA, Angers, France, March 2018.
- Team seminar, IMAG, Grenoble, France, March 2018.
- Team seminar, AgroParisTech, Paris, France, March 2018.
- Team seminar, I2M, Marseille, France, March 2018.
- Network Mexico, Montpellier, France, November 2017.
- 49th Days of Statistics (SFDS), Avignon, France, June 2017.
- Team seminar, AgroParisTech, Paris, France, October 2016.
- "Journées Mathinfo de l'INRA", Mallemort, France, October 2016.
- Workshop CRoNoS, satellite event of Compstat, Oviedo, Spain, August 2016.
- Workshop AgriBigData, Montpellier, France, July 2016.
- Team seminar, MIAT, Toulouse, France, January 2016.
- 47th Days of Statistics (SFDS), Lille, France, June 2015.

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Supervision

2015 **Internship of a Master Degree student**, *University of Montpellier*.
Louis Raynal, The Bayesian Lasso (Co-supervisor with Pierre Pudlo)

Community

- Reviewer for Digital Signal Processing
- Meet and Greet with high school students, Montpellier France, October 23th 2017
- Speaker at the "Science Festival", Montpellier France, October 9th 2017
- Co-organizer of the 5th meeting "Young Statisticians – Guest Lecturers", 48th Days of Statistics Montpellier France, 2016
- Organizer of the workshop "Bayesian Nonparametric Models", 2016
- Co-organizer of the seminars of Ph.D students (IMAG), 2016

Personal Information

Born on March 14th 1989

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Website <http://www.math.univ-montp2.fr/~grollemund/>

Programming R, C++

Language French (native) and English (professional)

Skills Curious, intent

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