Paul-Marie Grollemund

Postdoctoral Researcher in Statistics

Position

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 Meïli Baragatti (Mistea, Montpellier SupAgro).

Title: Bayesian Linear Regression on Functional Data.

Thesis defended the November 22th 2017, Manuscript (abstract) here.

Before the commission:

- o Christophe Abraham, Montpellier SupAgro, PhD Director
- o Meili Baragatti, Montpellier SupAgro, Co-supervisor
- o Pierre Druilhet, University Blaise Pascal, Examiner
- o André Mas, University of Montpellier, Member of the commission
- Éric Parent, AgroParisTech, President of the jury
- o Anne Philippe, University of Nantes, Member of the commission
- o Pierre Pudlo, Aix-Marseille University, PhD Co-director
- o 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 Meïli 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 \star *MCMC* methods \star Regression Model \star Functional Data \star high dimensional statistics \star Sparsity \star Elicitation of prior knowledge \star Posterior contraction \star model misspecification

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.

Manuscripts in Preparation

- Abraham C. and Grollemund P.M. (2018) Posterior Consistency for Bayesian Functional Linear Regression using Wald Approach.
- 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.
- Le Tacon F., Murat C., Gravier J., Montpied P., Dupouey J.L., Grollemund P.M., Baragatti M. (2018) Evolution of the Périgord black truffle (Tuber melanosporum Vittad.) production in the Vaucluse department (France) from 1903 to 1988. Influence of annual climatic variations and possible effects of climate changes or sociological factors.

Code R

• Implementation of the Bliss method available on GitHub here (R package in progress).

Main talks

- 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.

Supervision

Louis Raynal, The Bayesian Lasso (Co-supervisor with Pierre Pudlo)					

2015 Internship of a Master Degree student, University of Montpellier.

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