Short Curriculum Vitæ

Sylvain Arlot
Orsay Mathematics Department
Bâtiment 307 – Faculté des Sciences d’Orsay
Paris-Sud University
F-91405 ORSAY Cedex France

Phone: +33 1 69 15 67 31
E-mail: sylvain.arlot@math.u-psud.fr
Webpage: http://www.math.u-psud.fr/~arlot/

Born March 2, 1983
French citizen

Administrative status

2015 – . . . Professor University Paris-Sud, Mathematics department.
2012–2015 CNRS junior researcher (1st class) DI ENS, École Normale Supérieure, Paris
2008–2012 CNRS junior researcher (2nd class) DI ENS, École Normale Supérieure, Paris
2005–2008 PhD fellow Université Paris-Sud, Orsay

Main research interests

Statistical learning, non-parametric statistics. More precisely:

• Data-driven tuning of learning algorithms, model selection, penalization, (V-fold) cross-validation.
• Random forests.
• Change-point detection.

Main publications

3. (2019) Sylvain Arlot, Stefano Marmi and Duccio Papini Coupling the Yoccoz-Birkeland population model with price dynamics: chaotic livestock commodities market cycles Nonlinearity, Volume 32, Number 7, pp 2564–2592


Books and book chapters


Teaching book

Distinctions

PEDR (2017–2020) and PES (2011–2014) bonuses
2011 Ph.D. dissertation award Marie-Jeanne Laurent-Duhamel French Statistical Society
2010–2011 Peccot Lecture Collège de France

Member of scientific projects and networks

2019– Leader of the Celeste Project-team INRIA Saclay
See also https://www.math.u-psud.fr/celeste/index.html.
2018–2022 Coordinator for U. Paris-Sud of the ANR project Fast-Big (leader: Bertrand Thirion, INRIA Saclay)
See also https://project.inria.fr/fastbig/.
2015–2018 Member of the Select Project INRIA Saclay
2015 Member of the project BeFast (CNRS, PEPS Fascido) (leader: Alain Celisse, Université Lille 1)
2013–2014 Member of the MASTODONS project Gargantua (leader: Zaïd Harchaoui, INRIA Grenoble)
2012–2016 Member of the ANR project Calibration (leader: Vincent Rivoirard, Univ. Paris Dauphine)
2011–2015 Member of the Sierra Project INRIA Paris
2009–2012 Leader of the ANR project Detect: “New statistical approaches for computer vision and bioinformaties”
See also http://www.math.u-psud.fr/~arlot/ANR-DETECT.htm.
2008–2010 Member of the Willow Project INRIA Paris
2007–2013 Member of the European network of excellence Pascal (Pattern Analysis, Statistical Modelling and Computational Learning) then PASCAL 2 from 2008
2005–2008 Member of the Select Project INRIA Saclay

Scientific visits

Mar. 2012 Università degli Studi di Siena Duccio Papini
Feb. 2011 Scuola Normale Superiore di Pisa Stefano Marmi
Dec. 2009 University of California, Berkeley Peter L. Bartlett
Nov. 2009 Scuola Normale Superiore di Pisa and Università degli Studi di Siena Stefano Marmi and Duccio Papini
Jan.–Apr. 2008 University of California, Berkeley Peter L. Bartlett

Collective responsibilities

2019– Coordinator of the math-AI program Labex Mathématique Hadamard
2019 President of recruiting committees (1 committee)
2018– Executive committee member Fondation Mathématique Jacques Hadamard (FMJH)
2018– Associate editor Annales de l’Institut Henri Poincaré B, Probability and Statistics
2016– Member of steering committee Center for Data Science Paris-Saclay
2016– Member of recruiting committees (4 committees since 2016)
2016–2019 Coordinator of the math-CS program Labex Mathématique Hadamard
2012–2015 Elected member of the laboratory council DI/ENS

Referee

- **Conferences:** AISTATS, COLT, ICML, NeurIPS
- **Books:** Société Mathématique de France
- **Mathematical Reviews** (since 2017)
- **Projects:** Pascal Challenge

Member of “Habilitation” committees (HDR)

Feb. 2019  Servane Gey  Université Paris-Descartes  Referee
Nov. 2018  Émilie Lebarbier  Université Paris-Sud  President

Member of Ph.D. committees

Dec. 2019  Solène Thépaut  Université Paris-Sud  Examiner
Sep. 2016  Marie-Liesse Cauwet  Université Paris-Sud  Examiner
June 2016  Mokhtar Alaya  Université Pierre-et-Marie-Curie  President
May 2016  Gwenaelle Mabon  Université Paris Descartes  Examiner
Feb. 2016  Jérémy Bensadon  Université Paris-Sud  President
Nov. 2015  Erwan Scornet  Université Pierre et Marie Curie  Examiner
Nov. 2015  Mélisande Albert  Université Nice Sophia-Antipolis  Examiner
July 2015  Maud Thomas  Université Paris Diderot  Examiner
Apr. 2011  Pierre Connault  Université Paris-Sud  Examiner
June 2009  Matthieu Lerasle  INSA Toulouse  Examiner

Advisor

- **Ph.D. students:**
  - El Mehdi Saad  (2019–...)  Interactions between statistical and computational aspects in machine learning  (50%; co-advisor: Gilles Blanchard)
  - Tuan-Binh Nguyen  (2018–...)  Efficient Statistical Testing for High-Dimensional Models  (60%; co-advisor: Bertrand Thirion)
  - Guillaume Maillard  (2016–...)  Aggregated cross-validation  (50%; co-advisor: Matthieu Lerasle)

• Master 2 students:
  Guillaume Maillard (2016) Aggregated cross-validation (50%; co-advisor: Matthieu Lerasle)
  Matteo Tanzi (2013) Denoising and Parameter Estimation for Deterministic Dynamical Systems (co-advised with Stefano Marmi)
  Rémi Lajugie (2012) Metric learning for change-point detection (50%; co-advisor: Francis Bach)
  Matthieu Solnon (2010) Multi-task learning and minimal penalties (50%; co-advisor: Francis Bach)

• Master 1 students:

Talks and organization of scientific events

• (Co-)organization of 10 one-shot scientific events, and co-organization of a monthly seminar since 2013.
• 28 talks in international conferences or workshops (among which 13 abroad),
• 8 talks in national conferences or workshops,
• 39 seminar talks (among which 7 abroad).
• Detailed list available on my webpage: https://www.math.u-psud.fr/~arlot/talks.htm

Teaching

• Detailed list available on my webpage: https://www.math.u-psud.fr/~arlot/teaching.htm
• Master 2: Statistical learning (Paris-Sud, since 2009-10), Seminar coordination (Paris-Sud, since 2016-17), Preparation of Mathematics “aggregation” (option probability and statistics, Paris-Sud, since 2016-17), Supervised classification (Centrale Paris, 2008-09).
• Bachelor: Probability and Statistics (2nd year, Paris-Sud, lectures and coordination since 2016-17 practical work since 2015-16), Mathematics board (ENS Paris, 2nd year level, admission exam, section “humanities and economy”, 2010-13), Calculus (1st year, Paris-Sud, practical work, 2005-08).
Academics: Ph.D. thesis and habilitation

2014  Habilitation in Mathematics Université Paris Diderot  Title: Contributions to statistical learning theory: estimator selection and change-point detection.


Languages

French (native)
English (fluent)