SHORT CURRICULUM VITÆ

Sylvain Arlot
Orsay Mathematics Department
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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


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

2018–2022  **Coordinator for U. Paris-Sud of the ANR project Fast-Big**  (leader: Bertrand Thirion, INRIA Saclay)

2015–2016 **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 bioinformatics”

See also [http://www.math.u-psud.fr/~arlot/ANR-DETECT.htm](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**

<table>
<thead>
<tr>
<th>Date</th>
<th>Institution</th>
<th>Names</th>
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<tr>
<td>Mar. 2012</td>
<td>Università degli Studi di Siena</td>
<td>Duccio Papini</td>
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<tr>
<td>Feb. 2011</td>
<td>Scuola Normale Superiore di Pisa</td>
<td>Stefano Marmi</td>
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<tr>
<td>Dec. 2009</td>
<td>University of California, Berkeley</td>
<td>Peter L. Bartlett</td>
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<tr>
<td>Nov. 2009</td>
<td>Scuola Normale Superiore di Pisa and Università degli Studi di Siena</td>
<td>Stefano Marmi and Duccio Papini</td>
</tr>
<tr>
<td>Jan.–Apr. 2008</td>
<td>University of California, Berkeley</td>
<td>Peter L. Bartlett</td>
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**Collective responsibilities**

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

• Conferences: AISTATS, COLT, ICML

• Books: Société Mathématique de France

• Mathematical Reviews (since 2017)

• Projects: Pascal Challenge

Member of “Habilitation” committees (HDR)

Nov. 2018 Émilie Lebarbier Université Paris-Sud President

Member of Ph.D. committees

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:

  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:**
  
  Anisse Ismaili and Pierre Gaillard (2009) *The Lasso*

**Talks and organization of scientific events**

- (Co-)organization of 9 one-shot scientific events, and co-organization of a monthly seminar since 2013.
- 26 talks in international conferences or workshops, 8 talks in national conferences or workshops, 47 seminar talks (in France or abroad).
- Detailed list available on my webpage: [https://www.math.u-psud.fr/~arlot/talks.htm](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](https://www.math.u-psud.fr/~arlot/teaching.htm)
- **Ph.D. level tutorials:** JES 2016 (Fréjus), CEMRACS 2013 (CIRM, Marseille), Université de Cergy (2012), Scuola Normale Superiore di Pisa (2011), Cours Pecot 2011 (Collège de France, Paris).
- **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).
- **Master 1:** Multivariate statistics (Paris-Sud, M1 Bioinformatic-Biostatistics, 2015-18), Statistical learning (ENS Paris, 2010-12), Mathematical lectures: classification (ENS Paris, 2010-12).
- **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)