

# Curriculum Vitae

## Mathieu Faure

Birthdate: 20/01/1977

Adress: 26, rue Aicard, 13007 Marseille

☎ (+33)6 87.80.98.01 / ✉ mathieu.faure@univ-amu.fr

Assistant professor at GREQAM.

## 1. POSITIONS

- 2008-2009*    **Postdoc with Michel Benaïm:**  
Mathematics institute, Neuchâtel university.
- 2009-2010*    **Postdoc with Sebastian Schreiber:**  
Département of Evolution and Ecology, UC Davis.
- 2010-2011*    **Postdoc with Michel Benaïm:**  
Mathematics institute, Neuchâtel University.
- 2011-*        **Assistant Professor**  
Aix-Marseille University, GREQAM, AMSE.

## 2. PUBLICATIONS

*Self-normalized large deviations for markov chains*, **Electronic Journal of Probability**, **7** pp. 7-31 (2002).

(en coll. avec G. Roth) *Stochastic approximations of set-valued dynamical systems: convergence with positive probability to an attractor*, **Mathematics of Operations Research**, **35**(3) pp. 624-640 (2010).

(en coll. avec Michel Benaïm) *Stochastic Approximations, Cooperative Dynamics and Supermodular Games*, **Annals of Applied Probability**, **22**(5), 2133-2164 (2012).

(en coll. avec Michel Benaïm) *Consistency of Vanishingly Smooth Fictitious Play*, **Mathematics of Operations Research**, **38**(3), 437-450 (2013).

(en coll. avec Gregory Roth) *Invariant measures of set-valued dynamics and ergodic properties of APTs*, **Stochastics and Dynamics**, **13**(1), (2013).

(en coll. avec Sebastian Schreiber) *Quasi-Stationary distributions and randomly perturbed dynamical systems*, **Annals of Applied Probability**, **24**(2), 553-598 (2014).

(en coll. avec Mario Bravo) *Reinforcement Learning with Restrictions on the Action Set*, **Siam Journal on Control and Optimization**, **53**(1), 287–312 (2015)

(en coll. avec Sebastian Schreiber) *Convergence of generalized urn models to non-equilibrium attractors*, **Stochastic processes and their Applications**, **125**(8), 3053–3074 (2015)

(en coll. avec Pierre Gaillard, Bruno Gaujal et Vianney Perchet) *Online learning and game theory. A quick overview with recent results and applications*, **ESAIM: proceedings and surveys**, **51**, 246–271 (2015).

### 3. GRANTS, SCIENTIFIC ACTIVITY

#### Grants:

- **GDR 2932 *Théorie des Jeux : Modélisation Mathématique et Applications***: coordinator for GREQAM. *since 2011*.
- **ANR *Mobilité sociale, exclusion sociale et réseaux sociaux (SOSOSO)***: member (PI: S. Bervoets). *2014–2017*.
- **PEPS *Réseaux économiques et apprentissage (RECAP)***: PI. *2014–2016*.
- **ANR *Communication and information in games on networks (CIGNE)***: member (coordinator: M. Laclau). *2016–2019*.

**Editorial activity:** referee for *Dynamic Games And Applications*, *Games and Economic Behavior*, *International Journal of Game Theory*, *Journal of Dynamics and Games*, *Journal of Mathematical Analysis and Applications*, *Journal of Mathematical Biology*, *Mathematical Economic Letters*, *Mathematics of operations research*, *Siam Journal on Control and Optimization*, *Stochastics*.

#### external examiner for Phd defenses:

- August 2013: Steven Perkins, *Advanced Stochastic Approximation Framework and their Applications* (Phd advisor: David Leslie);
- June 2014: Bastien Marmet, *Long time Behavior of Stochastic Population models* (Phd advisor: Michel Benaïm);

## 4. TEACHING (SINCE 2011)

<i>2011-2012</i>	<b>1st year <i>economics and management</i>:</b> in charge of the <i>Mathematics 1</i> course.
<i>2011-2012</i>	<b>3rd year <i>economics and management</i>:</b> in charge of the <i>quantitative technics</i> course.
<i>2012-2015</i>	<b>Master 1 AMSE:</b> in charge of the <i>game theory</i> course.
<i>2012-2016</i>	<b>2nd year <i>economics and management</i>:</b> in charge of the <i>game theory</i> course.
<i>2012-2016</i>	<b>2nd year <i>economics and management</i>:</b> in charge of the <i>introduction to probability theory</i> course.
<i>2011-2016</i>	<b>Magister <i>ingénieur économiste</i>:</b> in charge of the <i>advanced mathematics</i> course.

## 5. COMMUNICATIONS ORALES

## Conferences, workshops (2011–2016)

<i>Septembre 2011</i>	<b>Mathematical Aspects of Game Theory</b> Toulouse School of Economics, Toulouse.
<i>Avril 2012</i>	<b>Game Theory, Evolutionary Game Theory and Learning in Games</b> Spring school, Diablerets, Suisse.
<i>Mars 2013</i>	<b>Workshop "Modèles stochastiques en temps long"</b> CIRM, Luminy.
<i>May 2013</i>	<b>SMAI annual conference</b> Seignosse.
<i>July 2013</i>	<b>Workshop "evolutionary dynamics and market behavior"</b> HIM, Bonn.
<i>Novembre 2013</i>	<b>UECE Lisbon meetings "Game Theory and Application"</b> Lisbon.
<i>July 2014</i>	<b>Mathematical Aspects of Game Theory and Applications.</b> station biologique, Roscoff.
<i>August 2014</i>	<b>Journées MAS.</b> Toulouse.
<i>November 2015</i>	<b>Workshop: Stochastic methods in game theory: learning in games.</b> NUS, Singapore.
<i>April 2016</i>	<b>2nd annual conference on network science and economics.</b> Stanford.

## Seminars (since 2011)

- 15 Mars 2011*      **Seminar of Probability and Stochastic Processes.**  
Ecole Polytechnique Fédérale de Lausanne, Lausanne.
- 31 Mars 2011*      **ALEA workshop.**  
INRIA, Bordeaux.
- 4 Avril 2011*      **Paris Game Theory Seminar.**  
Institut Henri Poincaré, Paris.
- 27 Avril 2011*      **Génétique des Populations Stochastiques**  
UPMC, Paris.
- 13 Mai 2011*      **MAD seminar**  
GREMAQ, Toulouse.
- Octobre 2011*      **Ecolunch**  
GREQAM, Marseille.
- Décembre 2013*      **ACGO seminar**  
UNIVERSIDAD DE CHILE, Santiago.
- Mars 2014*      **Probability Seminar**  
Institut de Mathématiques, Neuchâtel.
- Mai 2014*      **MAD seminar**  
GREMAQ, Toulouse.
- Décembre 2015*      **Probability and Statistics seminar**  
I2M, Marseille.
- Janvier 2016*      **Paris Game Theory Seminar**  
IHP, Paris