Gaëtan Fournier
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Current position

Maître de conférence in applied mathematics at the Aix-Marseille School of Economics.

Research Activities

Research interest.

★ **Game Theory :** Repeated games, Incomplete information, Efficiency.
★ **Economic Theory :** Spatial competition, Hotelling games, Voting models.
★ **Financial Mathematics :** Exchange games, Pricing, Risk aversion.
★ And others : Approachability, Congestion games, Stopping games, Absorbing games, MDP.

Research articles.

1/ HOTELLING GAMES ON NETWORK : EFFICIENCY OF EQUILIBRIA.
with Marco SCARSINI. Accepted for publication at *Mathematics of Operations Research*.
Full text - Abstract - Presentation.

2/ PRICE DYNAMICS ON A RISK AVERSE MARKET WITH ASYMMETRIC INFORMATION.
with Bernard DE MEYER, Revise and resubmit at *Games and Economic Behavior*.
Full text - Abstract - Presentation.

3/ PURE HOTELLING GAMES WITH NON UNIFORMLY DISTRIBUTED CONSUMERS.
Revise and resubmit at *International Journal of Game Theory*.
Full text - Abstract - Presentation.

4/ A MULTI-ASSET MARKET WITH ASYMMETRIC INFORMATION AND RISK AVERSION.
with Bernard DE MEYER.
Full text - Abstract - Presentation.

5/ APPROACHABILITY WITH CONSTRAINTS (WORKING PAPER).
with Eilon SOLAN and Avishay WEINBAUM, Submitted for publication.
Abstract - Presentation.

6/ PROBABILITIC HOTELLING GAMES (WORKING PAPER).
Abstract.

7/ LOCATION GAME WITH BINARY DEMAND (WORKING PAPER).
with Karine VAN DER STRAETEN and Jörgen WEIBULL.
Abstract.

Education and past affiliations

2017 -	AMSE, UNIVERSITÉ D'AIX-MARSEILLE. Maître de conférence.
2016 - 2017	IAST, TOULOUSE. Post-doctoral fellowship, IAST program at the Toulouse School of Economics.
2015 - 2016	TEL-AVIV UNIVERSITY. Post-doctoral fellowship, School of Mathematical Sciences.
2011 - 2015	CES, UNIVERSITY PARIS 1. PhD Student adviced by *Bernard De Meyer* and Teaching assistant for the UFR 27 (Mathematics and Computer Sciences) of the Paris 1 University. Jury members : *Joseph ABDOU, Bernard DE MEYER, Catherine RAINER, Marco SCARSINI, Eilon SOLAN, Tristan TOMALA.*
2010 - 2011	UNIVERSITY PARIS 1. Master Sc. MMMEF, with first class honours.
2007 − 2010	PARIS 11 UNIVERSITY - ORSAY. Admitted to the Agregation of mathematics.

Presentations and research invitations

International conferences.

2017	28TH INTERNATIONAL CONFERENCE ON GAME THEORY, Stony Brook, USA. STOCHASTIC METHODS IN GAME THEORY, Erice, Italy.
2016	YEM2016, Brno, Czech Republic.
2015	CONGESTION GAMES WORKSHOP AND STOCHASTIC GAMES WORKSHOP, Singapore. 26TH INTERNATIONAL CONFERENCE ON GAME THEORY, Stony Brook, USA.
2014	14TH SAET CONFERENCE ON CURRENT TRENDS IN ECONOMICS, Tokyo, Japon.
2013	STOCHASTIC METHODS IN GAME THEORY, Erice, Italy.

Research Visit.

Jan 2016	INVITED IN THE INSTITUTE OF SCIENCE AND TECHNOLOGY, Vienna, Austria. *Work with Krishnendu Chatterjee.*
Dec 2015	INVITED IN THE INSTITUTE FOR MATHEMATICAL SCIENCES, Singapore.
Jan 2015	INVITED IN ISRAELI UNIVERSITIES, (Technion, Tel-Aviv-University, HU of Jerusalem), Israel.
Aug 2014	INVITED IN THE UNIVERSITY SUTD, Singapore University of Technology and Design, Singapore. *Work with Marco SCARSINI and Bruno ZILIOTTO on congestion games.*
Aug 2013	INVITED IN THE UNIVERSITY SUTD, Singapore University of Technology and Design, Singapore. *Work with Marco SCARSINI on Hotelling games.*

2017	Eco-lunch Seminar, Greqam, Aix-Marseille University.
	PIREN 2017, Interdisciplinary Research Event, Ax-les-Thermes.
	Probability Seminar, Institut de Mathématiques de Toulouse.
	Lemma Seminar, University Paris 2.
	CIGNE 2017, Summer School on Network Theory, Roscoff.
2016	Workshop Games and Optimization, GATE Lyon - Saint Etienne.
	The 8th Israeli Game Theory conference, Tel Aviv University.
	Game Theory Seminar, Technion - Israël Institut of Technology.
	Bar-Ilan Game Theory Seminar, Bar-Ilan.
	GEL 2016 WINTER WORKSHOP, Luchon.
2015	Games research Group Seminar, Tel-Aviv University.
	Game theory seminar Seminar, Technion - Israel Institute of Technology, Haifa.
	Center for Rationality Seminar, Hebrew University of Jerusalem.
	Games research Group Seminar, Tel-Aviv University.
2014	School of Business and Economics Seminar,Maastricht University.
	SUTD Seminar, Singapore University of Technology and Design.
	Economics Theory Seminar, Maison des Sciences Economiques.

Teaching

2017 −	FACULTÉ D'ÉCONOMIE ET DE GESTION, UNIVERSITÉ D'AIX-MARSEILLE.
	Lecturer.
	▷ *Game Theory (Licence 2), Mathematics 1 (Licence 1), Mathematics 4 (Licence 2).*
2016 − 2017	MAGISTÈRE BANQUE FINANCE, UNIVERSITÉ PANTHÉON ASSAS.
	Lecturer.
	▷ *Modèles stochastiques appliqués à la finance (Master 1).*
2012 − 2015	UNIVERISTÉ PARIS 1.
	Teaching Assistant.
	▷ *Probability and finance Master MOSEF.* ▷ *Computer Language C.* ▷ *Imperfect competition in microeconomics.* ▷ *Topology and differential calculus.*
2009 − 2013	OTHER TEACHING :.
	▷ *École Nationale des Ponts et Chaussés, Travaux dirigés de théorie de la décision et théorie des jeux.* ▷ *École Supérieure d'Ingénieurs en Électronique et Électrotechnique, Numerical Analysis and optimization.* ▷ *Lycée Saint Louis et Lycée Janson de Sailly, Weekly Oral examinations.*

Other activities

2014 − 2015	ORGANIZATION OF THE PHD SEMINAR OF GAME THEORY, Institut Henri Poicaré, Paris.
2012 − 2013	CREATION AND ORGANIZATION OF THE PHD SEMINAR IN ECONOMICS-GAME THEORY DEPARTMENT, Maison des Sciences Économiques, Paris.
2012 − 2013	ORGANIZATION OF DOCTORISSIMES 4 AND 5, Maison des Sciences Économiques, Paris.

<u>Peer-Reviews</u>.

2013 –   MATHEMATICS OF OPERATIONS RESEARCH.
JOURNAL OF APPLIED PROBABILITY.
OPERATIONS RESEARCH LETTERS .
MATHEMATICAL SOCIAL SCIENCES.
RAIRO - OPERATIONS RESEARCH.
ANNALS OF APPLIED PROBAILITY.

<u>Mathematic Associations</u>.

2016   NEWSPAPER "LES ECHOS".
Publication in the french newspaper : "Les Echos". Article: Cours boursiers en dents de scie : chaos ou stratégie?.

2015   PARIS SCHOOL OF ECONOMICS.
Publication in the 5&5. Article: Cours boursiers en dents de scie : chaos ou stratégie?.

2014   MATHEMATIC SCHOOL IN LYCÉE LOUIS LE GRAND, Lycée Louis Le Grand.
Organization of a weekly mathematic school.

WORKING GROUP MATHEMATICS-BIOLOGY, Ecole Normale Supérieur, rue d'Ulm.
Several talks on the application of Game Theory in Biology, and organization of a Prisoner's Dilemma Tournament.

2012 –   MEMBER OF ANIMATH, Institut Henri Poincaré.
Organization of several african mathematic summer schools (Togo, Gabon).

Others

<u>Langage</u>.
 ▷ *French : First language.*
 ▷ *Enlish : Fluent.*

<u>Informatics</u>.
 ▷ *Daily use of LaTeX and Mathematica.*
 ▷ *Knowledge on C/C++, Maple - MuPAD, Matlab - Scilab.*

<u>Associations</u>.
 ▷ *Cultural activities in the penitentiary of Meaux, with the association Genepi.*