Xavier Venel

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## Curriculum Vitae

#### 2020- Present Associate Professor (Research) LUISS Guido Carli, (Rome, Italy). 2017-2020 **Teaching Position** École polytechnique, (Paris, France). 2015 - 2020Associated Member Paris School of Economics (Paris, France). 2014 - 2020Assistant Professor (Maître de conférence) Université Paris 1 Panthéon-Sorbonne, CES (Paris, France). On leave from 01/09/2020. 2012 - 2014Post-Doctorate School of Mathematical Science, TAU (Tel Aviv, Israel), 2008 - 2012Phd in applied mathematics Title : Existence of the uniform value in repeated games under the supervision of Jérôme Renault, GREMAQ, TSE (Toulouse, France), 2009 - 2012Teaching assistant at the University Toulouse 1 and Toulouse School of Economics (Toulouse, France), Student at the École Normale Supérieur de Cachan (Cachan, 2005 - 2008France)

# Administrative status

## Diploma, Awards and Grants

2012	Postdoctoral Scholarship, Tel Aviv University.
2012	Best student presentation (MODE 2012), Conference of the the-
	matic group MODE of the French Society of Applied Mathematics
	and Industry.
2009	Doctoral grant for "Normaliens",
2008	French national diploma for undergraduate teaching in Mathe-
	matics obtained ranked 45th,
2007	MSc "Optimisation, Games and applications to Economy" spe-
	cialization Game Theory, University Pierre and Marie Curie (Paris,
	France),
2005	BSc Mathematics University Paris Diderot (Paris, France),
2005	Undergraduate grant for "Normaliens".

30/11/1985 French Nationality

## Teaching

2020–Present	Teacher at LUISS Guido Carli
	Mathematical Game theory (PHD Program in Economics and Finance)
	Social Network Analysis (Bachelof Computer and Management).
2016 - 2020	Teaching assistant at École Polytechnique
	Problem sessions in Microeconomics (Eco 431)
2014 - 2020	Maitre de conférences at University Paris 1
	Stochastic game (graduate), Lesson
	Logic & Set (undergraduate), Lesson and problem sessions
	Real analysis (undergraduate), Lesson and problem sessions
	Integration (undergraduate), Problem sessions
	Microeconomie (undergraduate), Problem sessions
	Probabilities (undergraduate), Problem sessions
2009-2012	Lecturer at University Toulouse 1
	Linear algebra (undergraduate), Problem sessions
	Finance (undergraduate), Problem sessions
	Probabilites (graduate), Problem sessions
2008-2009	Weekly oral examination in the Classes Preparatoires Lycée
	Louis le Grand, Paris

## **Research** responsabilities

### Scientific activities :

- Member of the ANR young researcher project CIGNE ANR-15-CE38-0007-01 , Communication and Information in Games on Networks from October 2015
- **Referee** for Dynamic games and Applications, Economic Theory, European Journal of Operations Research, Games and Economic behavior, International Journal of Game Theory, Journal of Applied Probabilities, Mathematics of Operations Research, Mathematical Social Sciences and Operations Research Letters.

Organization of scientific events :

- Local organizer of the international conference MAGTA 2011 at Toulouse.
- **Organizer of a session** at IFORS 2014 (Conference of the International Federation of Operational Research Society).
- Co-organizer of the **Economic Theory seminar** at Centre d'Économie de la Sorbonne with Emily Tanimura from September 2016 to June 2020.

- Co-organizer of the Parisian Game Seminar from January 2017 to June 2020
- Co-Organizer of the summer school "Summer school on Network theory -CIGNE 2017" in Roscoff.
- Co-Organizer of the international conference "Paris Symposium on Games 2018" in Paris.
- Co-Organizer of the workshop "Information Design and Splitting Games 2019" in Paris.
- Co-organizer of the **One world Seminar** from March 2020.

#### Supervision :

- Stage de Licence (ENS Lyon) of Léo Gayral (together with B.Ziliotto) : Étude en temps long des processus de décision Markovien. (Juin 2016) .
- Master 1 Research project of Besart Grabanica and Doaa Seregaldin (June 2017) , of Lilian Hillairet (June 2020) .
- Master 2 Reasearch project of Antoine Dubois (Summer 2020).

#### Visiting :

- Invitation by Janos Flesch at Maastricht University from 16 to 19 September 2016.
- Invitation by Georges Zaccour at Montreal University from 5 to 25 April 2017.
- Invitation by Yves Guéron at Seoul National University from 11 to 17 September 2018.

## **Publications and Work in progress**

#### **Publications** :

- Asymptotic properties of optimal trajectories in dynamic programming (with S.Sorin and G.Vigeral), Sankhya A. Mathematical Statistics and Probability, 72(1), 237-245, 2010.
- On finite-time ruin probabilities with reinsurance cycles influenced by large claims (with M.Barges and S.Loisel), Scandinavian Actuarial Journal, 2013(3), 163–185, 2013.
- The value of a repeated game with a partially informed controller (with F. Gensbittel and M.Oliu-Barton), J. of Dynamics and Games, 1(3), 411–445, 2014.
- Commutative stochastic games, Mathematics of Operations Research, 40(2), 403-428, 2015.

- Attainability in repeated games with vector payoffs (with D.Bauso, E. Lehrer and E.Solan), Mathematics of Operations Research, 40(3), 739-755. 2015.
- On the values of repeated games with signals (with H. Gimbert, J. Renault, S. Sorin and W. Zielonka), Annals of Applied Probability, 26(1), 402-424, 2016.
- Recursive game : existence of the uniform value, Tauberian theorem and the Mertens conjecture "maxmin =  $\lim v_n = \lim v_{\lambda}$ " (with X. Li), International Journal of Game Theory, 45(1-2), 155-189, 2016.
- Strong uniform value in gambling houses and Partially Observable Markov Decision Processes (with B. Ziliotto), SIAM Journal on Control and Optimization, 54(4), 1983-2008, 2016.
- Long-Term Values in Markov Decision Processes and Repeated Games, and a New Distance for Probability Spaces (with J. Renault), Mathematics of Operations Research, 42(2), 349-376, 2017.
- Dynamic competition over social networks (with A. Mandel), European Journal of Operational Research, Elsevier, 280 (2), 597-608, 2020.
- Regularity of dynamic opinion games. Games and Economic Behavior, 126, 305-334, 2021.
- Harmonicity and decompositions in the space of countable games (with J.Abdou, N. Pnevmatikos and M. Scarsini), Accepted in Mathematics of Operations Research.
- History-dependent evaluations in finite POMDPs. (with B. Ziliotto), Accepted in SIAM Journal on Control and Optimization.

Work in progress :

- Modeling contagion by aggregation functions (with M. Grabisch and A. Rusinowska)
- Sequential competition and the strategic origins of preferential attachment (with A. Mandel)
- Robust communication on network. (with L. Renou and M. Vigeral)
- Games with Switching Costs Stationary vs History Independent Strategies . (with Y.Tsodikovich and A. Zseleva)

## Oral communications since 2016

#### **Conferences** :

- GEL 2016 Winter Workshop : Geometry, Evolution and Learning in Games Luchon (France) 4-8 January 2016
- Congrès thématique de la SMAI : MODE 2016 Toulouse (France), 1-5 April 2016
- 6th Workshop on Stochastic Methods in Game Theory Short talk+ poster Erice (Italie), 5-13 Mai 2017
- PGMO Days Paris (France), 13-14 November 2017
- Congrès thématique de la SMAI : MODE 2018 Autrans (France), 28-30 March 2018
- Coalitional Theory Networks 14th Workshop Maastricht (Netherlands), 5-6 April 2018
- International Workshop on Applied Probability Budapest (Hungary), 18-21 June 2018
- 29th Stonybrook Internation Conference on Game Theory Plenary lecture Stonybrook (United States), 16-20 July 2018
- Coalitional Theory Networks 15th Workshop Aix (France), 15-16 Mai 2019
- SAET International Conference Ischia (Italy), 1-6 July 2019

#### <u>Seminar :</u>

- Seminar of GERAD Université de Montréal, Montréal (Canada), 12 April 2017
- Interaction Seminar Université d'Aix-Marseille, Marseille (France), 15 February 2018
- Seminar of Microeconomics of Maastricht Maastricht University (Netherlands), 3 April 2018
- Seminar BK21 Seoul National University (South Korea), 13 September 2018
- Bar Ilan Game Theory Seminar Bar Ilan University, Bar Ilan (Israel), 28 Mai 2019
- Tel Aviv Game Theory Seminar School of Mathematical science, Tel Aviv (Israel), 4 June 2019
- Seminar SAMM : Statistique, Analyse et Modélisation Multidisciplinaire Université Paris 1, Paris (France), 7 June 2019