

CURRICULUM VITAE

Stéphane VILLENEUVE

Born 25 February 1971
Married, Two children
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Education

- 2006: Habilitation à diriger les recherches: Optimal Stopping, Singular Control with application to finance.
- 1999: PhD in Applied Mathematics, University of Marne la Vallée.
Supervisor: Damien LAMBERTON.
- 1995: MA in Statistics and Stochastic models in Finance, University Paris 7.

Positions

- 2007- Professeur des universités in Mathematics, Toulouse School of Economics
- Fall 2007 Visiting Professor University of California Santa Barbara
- 2002-2007 Maître de Conférences in Mathematics, Toulouse School of Economics.
- 1999-2002 Maître de Conférences in Mathematics, University of Evry.

Administrative duties

- Member of faculty council in economics, University of Toulouse.
- Responsible of the Master of Financial intermediation and actuarial studies Toulouse school of economics.
- Co-Responsible of the Master of science: *ingénierie mathématique*, University of Evry (1999-2002)

Affiliations and memberships

- Academic Fellow of EUROPLACE Institute of Finance since 2007.
- Coordinator of the Chaire IDEI *Marché des risques et création de valeurs* sponsored by SCOR.
- Responsible researcher of the program *Finance d'entreprise, Régulation bancaire et Théorie de l'agence*, supported by the EUROPLACE Institute of Finance (2007-2008).
- Member of the scientific project (Nouvelles interfaces des mathématiques), NIM 185, *Options réelles et théorie de l'investissement*, supported by the CNRS (2005-2008).
- Member of the scientific program AMAMEF supported by the European Science Fondation.
- PhD co-advisor of Catherine Bobtcheff, CEA-GREMAQ.

Policy Advice

- Part time consultant for the Chambre du commerce et de l'industrie de Toulouse.
- Part time consultant for ILOG SA.
- Past member (1999-2002) of the open source software on option pricing PREMIA supported by Ecole nationale des ponts et chaussées.
<http://www-rocq.inria.fr/mathfi/Premia/index.html>.

Publications

1. VILLENEUVE, S. (1999): Exercise regions of American options on several assets, *Finance and Stochastics*, vol 3, 295-322.
2. VILLENEUVE, S. et ZANETTE, A. (2002): Parabolic A.D.I. methods for pricing American options on two stocks, *Mathematics of Operation Research*, vol 27,121-149.
3. LOUBERGE, H; VILLENEUVE, S. et CHESNEY, M. (2002): Long term Risk Management of Nuclear waste, *Journal of Economic Dynamics and Control*, vol 27,157-180.
4. LAMBERTON, D. et VILLENEUVE, S. (2003): Critical Price near maturity for an American option on a dividend-paying stock, *Annals of Applied Probability*, vol 13, 800-815.
5. ERN, A.; VILLENEUVE, S. et ZANETTE, A. (2004): Adaptive finite element methods for local volatility European option pricing, *International Journal of theoretical and applied finance*, vol 7, 659-684.
6. DECAMPS, J.P., MARIOTTI T et VILLENEUVE, S. (2005): Irreversible investment under uncertainty, *Mathematics of Operation Research*, vol 30, No 2, 472-500.
7. DECAMPS, J.P., MARIOTTI T et VILLENEUVE, S. (2006): Irreversible investment in alternative projects, *Economic theory*, Vol 28, No 2, 425-448.
8. ROCHET, J.C et VILLENEUVE, S. (2005): Corporate Portfolio Management, *Annals of Finance*, Vol 1, No3, 225-243.
9. EKSTRØM, E. et VILLENEUVE, S. (2005): On the value of optimal stopping games. *Annals of Applied Probability* Vol. 16, No. 3, 1576-1596.
10. DECAMPS, J.P. et VILLENEUVE, S.(2007): Optimal dividend policy and growth option. *Finance and Stochastics* Vol 11, No 1, 3-27.
11. VILLENEUVE, S.(2007): On the threshold strategies for optimal stopping arising in Real option Theory. *Journal of Applied Probability* Vol 44, No1, 181-198.

12. LY VATH V., PHAM, H. et et VILLENEUVE, S. (2008): A mixed singular/switching control problem for a dividend policy with reversible technology investment. *Annals of Applied Probability* Vol 18, No 3, 1164-1200.
13. DECAMPS, J.P., MARIOTTI T et VILLENEUVE, S. (2009): Irreversible investment under uncertainty, Erratum, *Mathematics of Operation Research*, Vol 34 No 1, 255-256.

Forthcoming papers

- BOBTCHEFF, C. et VILLENEUVE, S. (2009): Technology Choice under Several Uncertainty Sources, *European Journal of Operation Research*.

Work in progress

1. ROCHET, J.C et VILLENEUVE, S. (2004): Liquidity Risk and Corporate Demand for Hedging and Insurance. Revise and resubmit to *Journal of Financial Intermediation*.
2. BIAIS, B.; MARIOTTI, T.; ROCHET, J.C. et VILLENEUVE, S.(2007): Large Risk, Limited Liability and Dynamic Moral Hazard. Revise and resubmit to *Econometrica*.
3. DECAMPS, J.P; MARIOTTI, T; ROCHET, J.C et VILLENEUVE, S. (2008): Free Cash-Flow, Issuance Costs and Stock Price Volatility. Revise and resubmit to *Journal of Finance*.
4. DECAMPS, J.P. et VILLENEUVE, S. (2008): on the Modeling of Debt maturity and Endogenous Default: a caveat. Revise and resubmit to *Econometrica*.
5. POUGET. S et VILLENEUVE, S. (2007): Price Formation with Confirmation Bias. Accepted to European Summer Symposium in Financial Markets 2008, Gerzensee (Suisse) and to the Annual Conference of the American finance Association (2010).

Mimeo

- BOBTCHEFF, C. et VILLENEUVE, S. (2005): Irreversible investment in competitive projects. A new motive for waiting to invest. Working paper Toulouse University.
- DECAMPS, J.P. et VILLENEUVE, S. (2003): Investment under uncertainty, the viewpoint of outside financier. Proceedings of the French Finance Association, Lyon 2003.

Conferences and Seminar

- Invited speaker to Symposium of Optimal stopping with applications, Turku Finland June 2009.
- First FBF/IDEI Conference on Investment Banking and Financial markets March 2009.
- Workshop on Dynamic Risk Sharing, Paris January 2009.
- World Congress of the Bachelier Society, London July 2008
- Congress of the American Mathematical Society, San Diego January 2008.
- Financial Mathematics Seminar, Stanford University December 2007.
- Financial Mathematics Seminar, University of California Santa Barbara October 2007.
- World Congress on Real options, Berkeley June 2007.
- Bachelier Seminar, IHP Paris May 2007.
- Seminar of the school of mathematics, University of Manchester November 2006.
- New mathematical methods in risk theory, Florence October 2005.

Referee for:

Journal of Economic Theory, Journal of Finance, review of Economic Studies, Finance and Stochastics, Annals of Applied Probability, Mathematics of Operation Research, Mathematical Finance, Stochastic Processes and their

applications, Operation Research, Journal of Mathematical Economics, International Journal of Theoretical and Applied Finance.

Teaching Experience

Toulouse University

- Stochastic Processes, MS Toulouse School of Economics (Lecture in english)
- Derivatives, MS Marché et Intermédiaires Financiers, (Lecture in english).
- Computational Finance, Master of Finance, IAE Toulouse, (Lecture in english).
- Arbitrage in continuous time, Master of Finance, IAE Toulouse, (Lecture in english).
- Probability Theory, Licence Math-Eco Toulouse.
- Time Series, Magistère Economiste-Statisticien Toulouse.

Ecole nationale des techniques avancées, Paris.

2000-2002 Mathematical models in Finance.

Ecole Normale supérieure, CACHAN

2000-2002 Applied probability in Finance.

Sorbonne University

2000-2002 Stochastic Calculus in Finance, master of finance.