February 2009

CURRICULUM VITAE

Eric RENAULT

PRESENT POSITION: Henry A Latane Distinguished Professor of Economics
University of North Carolina

ADDRESS: Department of Economics
Gardner Hall
University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-3305

EDUCATION:

1983:	Paris University (Dauphine), Ph.D.
	(Applied Mathematics for Social Sciences)
	Thesis Committee: P. Champsaur, B. Cornet, J. Lesourne, H. Moulin
1977:	ENSAE , Paris,
	(Ecole Nationale de la Statistique et de l'Administration Economique) M.S. in Economics and Statistics

AWARDS AND HONORS

1994:	Chair, Econometric Program Committee of the European Meeting of the Econometric Society, Maastricht
1994-1999:	Fellow, Institut Universitaire de France
1995:	Invited Speaker, World Congress of the Econometric Society, Tokyo
1998:	Invited Speaker, CORE lectures, Louvain la Neuve
1999:	Fellow of the Econometric Society
1999:	Chair, EC^2 Conference on Financial Econometrics, Madrid
2003:	Marcel Dagenais Price for the period 2000-2003 (Societe Canadienne de Science Economique)
2003-2004:	Canada Research Chair in Financial Econometrics
2006 and 2008:	Song and Park Award for Excellence in Graduate Instruction, Economics Department, UNC at Chapel Hill
2007:	Stephen Ross Best Paper Award for the year 2006, Finance Research Letters.
2007:	Laffont Lecture, European Meeting of the Econometric Society, Budapest
2007:	Invited Co-Editor, Encyclopedia of Quantitative Finance, Financial Econometrics section, Wiley.

2007: Invited Speaker, Latin-American Meeting of the Econometric Society, Bogota.

2009: Keynote Speaker, Australian Meeting of the Econometric Society, Canberra.

OTHER ACADEMIC APPOINTMENTS

Research Fellow, CIRANO and CIREQ, Montreal

Adjunct Professor, Department of Statistics and Operations Research, University of North Carolina at Chapel Hill

Research Fellow, Center, Tilburg

PREVIOUS POSITIONS:

07/01/04 to present: Professor, Economics, UNC Chapel Hill

07/01/00 to 06/30/04: Professor, Economics, University of Montreal

02/15/02 to 07/01/02: Invited Professor, Princeton University.

07/01/98 to 06/30/00: Director of CREST, Rennes, France

Associate Professor, Applied Mathematics, Ecole Polytechnique, Paris

09/01/97 to 06/30/98: Director of CREST-INSEE, Paris

09/01/90 to 08/30/97: Professor, Economics, Toulouse University

Director of GREMAQ, UMR CNRS, Toulouse University starting in 1993.

1988-1990: Director of the Master Program in Finance, ENSAE, Paris

1986-1988: Associate Professor, Economics, Paris University (Dauphine)

1983-1986: Associate Professor, Mathematics, ENSAE, Paris

1979-1983: Assistant Professor, Economics, Conservatoire National des Arts et Métiers (CNAM), Paris.

1978-1979: Assistant Professor, Mathematics, ENSAE, Paris

PUBLICATIONS:

1. “Auto-Organisation et Dispersion Géographique des Marchés” (with J. Lesourne), *Economie Appliquée*, *Archives de l’ISMEA*, 38, n 3&4, 1985, 703-738.
2. “Résidus Généralisés, Résidus Simulés et leur Utilisation dans les Modèles non Linéaires” (with C. Gouriéroux, A. Monfort and A. Trognon), *Annales de l’INSEE*, 59/60, 1985, 71-96.
3. “Résidus Généralisés ou Interprétations Linéaires de l'Econométrie non Linéaire” (with C. Gouriéroux, A. Monfort and A. Trognon),in *Asymptotic Theory for Non i. i. d. Processes*, edited by J.P. Florens, Publication des Facultés Universitaires Saint-Louis, Brussels, 1986, 173- 224.

4. “Simulated Residuals” (with C. Gouriéroux, A. Monfort and A. Trognon), *Journal of Econometrics*, 34, 1987, 201-252.
5. “Generalized Residuals” (with C. Gouriéroux, A. Monfort and A. Trognon), *Journal of Econometrics*, 34, 1987, 5-32.
6. “Kullback Causality Measures” (with C. Gouriéroux and A. Monfort) *Annales d’Economie et de Statistique,* 6/7, 1987, 369-410.
7. “Testing for Common Roots” (with C.Gouriéroux and A. Monfort), *Econometrica,* 57, n 1, 1989, 171-186.
8. “Bilinear Constraints: Estimation and Test” (with C.Gouriéroux et A. Monfort), *Essays in Honor of Edmond Malinvaud, Empirical Economics*, MIT Press, 1990, 166-191.
9. “Tests sur le Noyau, l'Image et le Rang de la Matrice des Coefficients d'un Système Multivarié” (with C.Gouriéroux and A.Monfort), *Annales d’Economie et de Statistique, 32*, 1993, 81-112.
10. “Indirect Inference” (with C. Gouriéroux et A. Monfort), *Journal of Applied Econometrics,* 8, 1993, S85-S118.
11. “Modèles à Facteurs en Finance” (with S. Pastorello),in *Modélisation ARCH, Théorie Statistique et Applications dans le Domaine de la Finance,* edited by J. J. Droesbeke, B. Fichet and P. Tassi, Ellipses, Paris, 1994, 133-170.
12. “Inference in Factor Models” (with C. Gouriéroux and A. Monfort),in *Advances in Econometrics and Quantitative Economics, Essays in Honor of C.R. Rao,* edited par G.S. Maddala, P.C.B. Phillips and T.N. Srinivasan, Basil Blackwell, 1995, 311-353.
13. “Two-Stage Generalized Method of Moments and Application to Regression with Heteroskedasticity of Unknown Form” (with C. Gourieroux and A. Monfort), *Journal of Statistical Planning and Inference,* 50, 1996, 37-63.
14. “Stochastic Volatility” (with E. Ghysels et A. Harvey), in *Handbook of Statistics, Statistical Methods in Finance,* 14, edited by G. S. Maddala and C. R. Rao, North Holland, 1996, 119-183.
15. “Long-Memory Continuous Time Models” (with F.Comte), *Journal of Econometrics,* 73, n l, 1996, 101-149.
16. “Option Hedging and Implied Volatilities in a Stochastic Volatility Model” (with N. Touzi), *Mathematical Finance,* 6, n 3, 1996, 279-302.
17. “Non-Causality in Continuous Time Models” (with F. Comte), *Econometric Theory,* 12, n 2, 1996, 215-256.
18. “Econométrie de la Finance: La Méthode des Moments Généralisés”,in *Encyclopédie des Marchés Financiers,* edited by Y. Simon, Economica, Paris, 1997, 330-407.
19. “Econometric Models of Option Pricing Errors”, in *Advances in Economics and Econometrics*, *Seventh World Congress*, edited by D.M. Kreps and K.F. Wallis, Econometric Society Monographs, Cambridge University Press, 1997, 223-278.
20. “Les Techniques Quantitatives de la Gestion de Portefeuille” (with J.C.Rochet), *L'Actualité Economique,* 73, 1997, 265-310.
21. “Non-Parametric Methods and Option Pricing” (with E. Ghysels, O. Torres et V. Patilea),in *Statistics in Finance,* edited by D. Hand and S. Jacka, Arnold London, 1998, 261-280.

22. “Testing for Spurious Causality in Exchange Rates” (with K. Sekkat et A. Szafarz), *Journal of Empirical Finance,* 5, 1998, 47-66.
23. “A Note on GARCH Option Pricing and Hedging” (with R. Garcia), *Mathematical Finance,* 8, n 2, 1998, 153-161.
24. “Short Run and Long Run Causality in Time Series: Theory” (with J.M. Dufour), *Econometrica* 66, n 5, 1998, 1099-1126.
25. “Long-Memory in Continuous Time Stochastic Volatility Models” (with F. Comte), *Mathematical Finance* 8, n 4, 1998, 291-323, Reprinted in *Stochastic Volatility: Selected Readings*, N. Shephard (ed.), Oxford University Press, 2005.
26. “Testing for Embeddability by Stationary Scalar Diffusions” (with J.P. Florens and N. Touzi), *Econometric Theory,* 14, n 6, 1998, 744-769.
27. “Calibration by Simulation for Small Sample Bias Correction” (with C. Gouriéroux and N. Touzi), in *Simulation-based Inference in Econometrics, Methods and Applications*, edited by R. Mariano, T. Schuermann and M. Weeks, Cambridge University Press, February 1999.
28. “La mémoire longue en économie : discussion et commentaires”, *Journal de la Société Française de Statistique* 140(2), 1999, 79-89.
29. “Econometric Methods For Derivative Securities and Risk Management” (with R. Garcia and E. Ghysels), Editorial Guest, *Journal of Econometrics,* 94, January-February 2000, 1-7.
30. “Statistical Inference for Random-Variance Option Pricing” (with S. Pastorello and N. Touzi), *Journal of Business and Economic Statistics,* 18, n 3, July 2000, 358-367.
31. “Risque de modèle de volatilité” (with A. Alami), *Journal de la Société Française de Statistique* 141(1.2), 2000, 103-136.
32. “Latent Variables Models for Stochastic Discount Factors” (with R. Garcia), in *Handbooks of Mathematical Finance*, E. Jouini, J. Cvitanic and M. Musiela (eds.), Cambridge University Press, 2001, 159-184.
33. “Non-Gaussian Ornstein-Uhlenbeck Based Models and Some of their Uses in Financial Economics by O. Barndorff-Nielsen and N. Shephard, A Comment”, *Journal of the Royal Statistical Society* 63(2) B,2001.
34. “Symposium on Marshall’s Tendencies: Comments on J. Sutton’s Book”, *Economics and Philosophy,* 18, April 2002, p. 29-44.
35. “Empirical Assessment of an Intertemporal Option Pricing Model with Latent Variables” (with R. Garcia and R. Luger), *Journal of Econometrics*, 116, September/October 2003, p. 49-83.
36. “Iterative and Recursive Estimation in Structural Non-Adaptive Models” (with S. Pastorello and V. Patilea), Invited Lecture with discussion, *Journal of Business, Economics and Statistics*, October 2003, vol. 21 – n 5, p. 449-509.
37. “Temporal Aggregation of Volatility Models” (with N. Meddahi), *Journal of Econometrics,* 119, April 2004, p.355-379.
38. “Dynamic Factor Models” (with C. Croux et B. Werker), guest editorial, *Journal of Econometrics*, 119, April 2004, p. 223-230.
39. “Viewpoint: Option Prices, Preferences and State Variables” (with R. Luger and R. Garcia), *Canadian Journal of Economics,* 38, February 2005, p1-27.

40. “GARCH and Irregularly Spaced Data” (with N. Meddahi and B. Werker), *Economics Letters*, 90, February 2006, p 200-204.
41. “Short Run and Long Run Causality in Time Series: Inference” (with J.M. Dufour and D. Pelletier), *Journal of Econometrics*, 132, June 2006, p337-362.
42. “Disentangling Risk Aversion and Intertemporal Substitution through a Reference Level” (with R. Garcia and A. Semenov), *Finance Research Letters*, 3:3, September 2006, p 181-193.
43. “Factor Stochastic Volatility in Mean Models: a GMM approach” (with C. Doz), *Econometric Reviews*, 25:2, September 2006, p 275-309.
44. “Indirect Inference and Calibration of Dynamic Stochastic General Equilibrium Models” (with R. Dridi and A. Guay), *Journal of Econometrics*, 136, February 2007, p397-430.
45. “Proper Conditioning for Coherent VaR in Portfolio Management” (with R. Garcia and G. Tsafack), *Management Science*, 53:3, March 2007, p 483-494.
46. “On the Efficient Use of the Informational Content of Estimating Equations: Implied Probabilities and Euclidean Empirical Likelihood” (with B. Antoine and H. Bonnal), *Journal of Econometrics*, 138, June 2007, p 461-487.
47. “Linear Inverse Problems in Structural Econometrics: Estimation based on spectral decomposition and regularization” (with M. Carrasco and J.P. Florens), in *Handbook of Econometrics*, Vol. 6B, J Heckman (ed.), North Holland, 2007, p 5633-5751.
48. “Diffusion processes with polynomial eigenfunctions” (with C. Gourieroux and P. Valery), *Annales d’Economie et de Statistique*, March 2007, p 115-130.
49. “State Dependence in Fundamentals and Preferences Explains Risk-Aversion Puzzle” (with F. Chabi-Yo and R. Garcia), *Review of Financial Studies*, 21:2, April 2008, p 973-1011.
50. “Simulation-based estimation”, in *The New Palgrave Dictionary of Economics*, 2008, Eds Steven N. Durlauf and Lawrence E. Blume, Palgrave Macmillan.
51. “Moment-Based Estimation of Stochastic Volatility Models”, in *Handbook of Financial Time Series*, 2009, Eds Torben Andersen, Richard Davis, Jens-Peter Kreiss and Thomas Mikosch, Springer Verlag.
52. “Econometrics of Option Pricing Models” (with R. Garcia and E. Ghysels), *Handbook of Financial Econometrics*, Y. Aït-Sahalia and L.P. Hansen (eds.), North Holland, forthcoming.
53. “Efficient GMM with Nearly-Weak Instruments” (with B.Antoine), Tenth Anniversary Special Issue of *The Econometrics Journal*, forthcoming.
54. “Causality effects in return volatility measures with random times" (with Bas Werker), *Journal of Econometrics*, forthcoming.
55. “Estimation of Objective and Risk-Neutral Distributions based on Moments of Integrated Volatility” (with R. Garcia, M. A. Lewis and S. Pastorello), *Journal of Econometrics*, forthcoming.

WORKING PAPERS:

1. "Nonparametric Instrumental Regression" (with S. Darolles and J.P. Florens), Working Paper CREST 2000-17, 2000. Fifth "Revise and Resubmit" in *Econometrica*..
2. "Efficient Derivative Pricing by Extended Method of Moments" (with C. Gourieroux and P. Gagliardini), "Revise and Resubmit" in *Econometrica*.
3. "Estimation of Stable Distributions by Indirect Inference" (with R. Garcia and D. Veredas), "Revise and Resubmit" in *Journal of Econometrics*.
4. "Implications of Asymmetry Risk for Portfolio Analysis and Asset Pricing" (with F. Chabi-Yo and D. Leisen), Submitted.
5. "Efficient Minimum Distance Estimation with Multiple Rates of Convergence" (with B. Antoine), Submitted.
6. "On Portfolio Separation Theorems with Heterogeneous Beliefs and Attitudes towards Risk" (with F. Chabi-Yo and E. Ghysels), Submitted.
8. "Fractional Stochastic Volatility Models" (with F. Comte and L. Coutin), manuscript, 2004.
9. "Asymmetric Smiles, Leverage Effects and Structural Parameters" (with R. Luger and R. Garcia), CIRANO Working Paper 2001s-01. .
10. "A Consumption Capital Asset Pricing Model with a Reference Level" (with R. Garcia and A. Semenov), manuscript 2003.
11. "Quadratic M-estimators for ARCH-Type Processes" (with N. Meddahi), Working Paper CIRANO 98s-29.

EDITORIAL SERVICES

A. Editorship

Editor, *Journal of Financial Econometrics* (with R. Garcia) since 2003

Associate Editor *Econometrica,* since 1997

Associate Editor *Journal of Econometrics*, since 1994

Associate Editor *Empirical Economics* since 2006

Associate Editor *Econometric Reviews* since 2009

Associate Editor *Annales d'Economie et de Statistique*, since 1988

Associate Editor *Economics and Philosophy*, from 1998 to 2006

Associate Editor *Econometric Theory,* from 1997 to 2000

Associate Editor *Journal of Business and Economic Statistics,* from 1993 to 1998

Editor, Annals Issue of the *Journal of Econometrics* "Econometric Methods for Derivative Securities and Risk Management" (with R. Garcia and E. Ghysels), 2000, Vol. 94, 1-2

Editor, Annals Issue of the *Journal of Econometrics* "Dynamic Factor Models" (with C. Croux and B. Werker), 2004, Vol. 119, 2

B. Refereeing

European Economic Review, Journal of Applied Econometrics, Journal of Empirical Finance, Econometric Journal, Review of Economic Studies, Scandinavian Journal of Statistics, Review of Economics and Statistics, Journal of the European Economic Association, Annals of Statistics.

PROGRAMM COMMITTEE:

Econometric Society European Meeting (2007, 2006, 2004, 2003, 2002, 1997, 1996, 1994, 1993, 1992, 1991, 1989, 1988)

Econometric Society World Meeting (2000)

Econometric Society North-America Winter Meeting (2008)

Rencontres Paris-Berlin de Statisticiens (1999)

Rencontres Franco - Belges De Statisticiens (1999, 1998)

Journées Internationales de l'Association Française de Finance (1999, 1988)

Conférence Internationale du Groupement ADRES (1992, 1990)

European Finance Association (2004)

RESEARCH ADMINISTRATION:

Member of the Board of Electors to the Man Professorship of Quantitative Finance, University of Oxford, 2008.

Evaluation of Projects, FCAR (Canada) and NSF (USA)

Audit Committee for Belgium Universities in Economics, February 2000

Scientific Head of Selection Committee for CIFRE (France), 1999-2000

Audit Committee for the CORE (Louvain la Neuve, Belgium), March 1998

INVITED SEMINARS since 1999

Mathematical Finance Seminar, University of Chicago, 2008

Finance Seminar, Northwestern University, 2008

Econometrics Seminar, Simon Fraser University, 2008

Econometrics Seminar, Indiana Bloomington, 2008

Econometrics Seminar, Boston College, 2007

Econometrics Seminar, Yale University, 2007

Finance Seminar, Tilburg, 2005, 2006, 2008

Econometrics Seminar, Chicago Graduate School of Business, 2003, 2006

Triangle Econometrics Workshop, North Carolina, 2004, 2006, 2008

Macro Seminar, Atlanta Fed, 2005

Econometrics Seminar, Vanderbilt University, Nashville, 2005

Mathematical Finance Seminar, NC State University, Raleigh, 2005

Workshop on Empirical Methods for DSGE Models, Cleveland Fed, 2004
Colloquium de Statistique, University Paris 5, 2004
Econometrics Seminar, Cornell University, 2004
Malinvaud Seminar of Econometrics, Paris, 2004, 2009
Econometrics Seminar, Harvard MIT, 2003
Finance Seminar, McGill University 2003
Finance Seminar, Université Laval, Québec, 2003
Econometrics Seminar, University of Toronto, 2002
Finance Seminar, Kenan-Flagler Business School, UNC Chapel Hill, 2002
Finance Seminar, Mac Master University, Hamilton, 2002
Econometrics Seminar, University of Pennsylvania, 2001, 2003, 2008
Finance Seminar, Princeton University, 2001
Econometrics Seminar, University of British Columbia, 2001, 2008
Finance Seminar, Concordia University, 2001
Econometrics Seminar, Chicago Graduate School of Business, 2000
Econometrics Seminar, Queens University, 2000
Econometrics Seminar, University of Iowa, 2000
Paris Seminar in Probability Theory, University Paris 6, 2000
CIRANO Seminar in Finance, Montréal, 2000
Econometrics Seminar, LSE, London, 1999
Seminar of Statistics, University of Montréal, 1999
Seminar of Statistics, University Paris 7, 1999
Econometrics Seminar, Bristol, 1999
Econometrics Seminar, Oxford, Nuffield College, 1999.

PH.D. STUDENTS:

1. J.C. Gabillon 1993,

   PhD, Finance, University of Toulouse1. Current employment: Professor, Toulouse Business School

2. M. El Babsiri 1994,

   PhD, Applied Mathematics, University of Paris (Dauphine). Current employment: Head of Derivatives Department, Caisse des Depots, Paris.

3. N. Touzi 1994,

   PhD, Applied Mathematics, University of Paris (Dauphine). Current employment: Professor , Ecole Polytechnique, Paris.

4. M. Kouki 1994,

   Ph.D, Economics, University of Toulouse 1. Current employment: Professor , University of Tunis.

5. F. Comte 1994,

Ph.D, Applied Mathematics, University of Paris (Sorbonne). Current employment: Professor , University of Paris.

6. J-P. Lesne 1995,

Ph. D., Economics, University of Toulouse 1. First employment: CEO, Research Group, Toulouse.

7. G. Lezan 1996,

Ph.D., Applied Mathematics, University of Toulouse 1. Current employment: Quantitative research, BNP-Paribas, Paris.

8. A. Lazrak 1996,

Ph.D., Applied Mathematics, University of Toulouse 1. Current employment: Associate Professor, Business School, UBC, Vancouver.

9. N. Meddahi 1997,

Ph.D., Economics, University of Toulouse 1, First employment: Assistant Professor, University of Montreal

10. M. Torgeman 1997,

Ph. D., Economics, University of Toulouse 1, Current employment: Assistant Professor, University of Tunis

11. L. Germain 1997,

Ph. D., Finance, University of Toulouse 1, Current employment: Associate Professor, Toulouse Business School

12. V. Patilea 1997,

Ph. D., Applied Mathematics, University of Louvain-la-Neuve, First employment: Assistant Professor, University of Orleans, France.

13. C. Doz 1998,

Ph. D., Economics, University of Paris-Dauphine, Current employment: Professor, University of Cergy, France.

14. E. Burgayran 1998,

Ph. D., Economics, University of Paris-Dauphine, First employment: Financial Division, French Postal Services

15. S. Darolles 1999,

Ph.D, Applied Mathematics, University of Toulouse 1, Current employment: Societe Generale, Paris.

16. R. Dridi 1999,

Ph. D., Economics, University of Toulouse 1

17. A. Alami 1999,

Ph. D., Economics, University of Paris-Dauphine, Current employment: CEO, Optima Finance Consulting, Casablanca

18. F. Chabi-Yo 2004,

    Ph. D., Economics, University of Montreal, Current employment: Department of Finance, Ohio State University.

19. B. Antoine 2007,

    Ph. D., Economics, University of Montreal, Current employment: Simon Fraser University, Vancouver, Canada

20. P. Dovonon 2007,

    Ph. D., Economics, University of Montreal, Current employment: Barclay’s Bank, Research unit, London.

21. M. Aguilar 2008,
    Ph. D., Economics, University of North Carolina at Chapel Hill, Current employment: Lecturer at UNC at Chapel Hill.

22. J. Yoon, 2008,
    Ph. D., Statistics, University of North Carolina at Chapel Hill, Current employment: Deutsche Bank, Global Finance & Foreign Exchange, Hong Kong.