GIANLUCA FUSAI

POSITION	Full Professor in Financial Mathematics
AFFILIATION	Dipartimento SEI (Dept. of Economics and Business), Università degli Studi del Piemonte Orientale, Novara, (Italy)
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PROFESSIONAL EXPERIENCE

- Since September 2006, Full professor in Financial Mathematics at Università del Piemonte Orientale, Dipartimento SEI (previously Dipartimento SEMEQ in Faculty of Economics), U. degli Studi del Piemonte Orientale, Novara, Italy.
- Since September 2011, holds a regular visiting position in Finance, Faculty of Finance, Cass Business School, City University, UK.
- May-July 2009, Invited Visiting Professor at Department of IEOR, Columbia University, New York.
- Research Fellow at Financial Options Research Centre, Warwick Business School, University of Warwick (UK), 2002-2010.
- Associate Professor in Financial Mathematics at Università del Piemonte Orientale, Faculty of Economics, Dipartimento SEMEQ (Novara, Italy), Sept. 2000-Sept. 2006.
- Research Assistant in Financial Mathematics at Università di Firenze (Firenze, Italy), Faculty of Economics, Dipartimento DIMAD, Dec. 1997- Sept. 2000.

ACADEMIC DUTIES

- Since May 2016, Director of the MSc in Management and Finance, Dipartimento SEI, U. degli Studi del Piemonte Orientale.
- Member of the PhD Board in Statistics and Mathematics for Finance, University of Milano Bicocca, 2008-present.
- November 2007-December 2011, Head of Dipartimento SEMEQ, Università del Piemonte Orientale.
- September 2010-2012, Co-Director of the Course of High Formation in Quantitative Finance, Business School of the Politecnico di Milano.
- Vice-Head of Dipartimento SEMEQ in the period 2003 to 2006. Among the activities, he participates to the revision of the rule book of the Dipartimento SEMEQ.
- Component of the Library Board, Faculty of Economics, Università degli Studi del Piemonte Orientale, since 2006.
- Collaboration with INRIA (the French National Institute for research in computer science and control) to the realisation of pricing models in the project PREMIA (www-rocq.inria.fr/mathfi/Premia/index.html), a software designated for pricing and hedging options on assets and interest rates and for calibration of financial models. In particular, I have cooperated in the version Premia 6.

EDUCATION

- Ph.D. in Finance, Business School, University of Warwick. Supervisor Prof. S. Hodges, FORC (Financial Options Research Centre), 2001. PhD Thesis: Applications of Laplace Transform for Evaluating Occupation Time Options and Other Derivatives.
- Doctorate in "Mathematical Analysis of Financial Markets" at the Università of Brescia, Italy. PhD Thesis: Inflation Targeting and Term Structure Modeling (in Italian). Supervisor: Prof. G. Diale, Università di Torino, Italy. Fields include: Option Pricing, Game Theory, Mathematical Analysis, Linear Programming, Probability and Stochastic Processes.

- M.Sc. with distinction in Statistics and Operational Research at University of Essex, Colchester, England. Fields include: Advanced Econometrics, Simulation, Time Series Analysis, Stochastic Processes, Financial Mathematics, Optimization: Theory and Algorithms, Functional Analysis. Dissertation on: GARCH Models and Volatility Forecast in the Option Market. Supervisor: Prof. M.A.H. Dempster, 1994.
- Laurea, equiv. BSc in Economics, (110/110 cum laude) at Università Bocconi, Milan, Italy. Dissertation on Stochastic Models and Bond Pricing. Supervisor: Prof. E. Castagnoli, 1992.

RESEARCH INTERESTS

Financial Engineering, Credit Risk, Commodity and Energy Markets, Financial Econometrics, Computational Finance, Asset Allocation, Technical Analysis

TEACHING

Undergraduate Level

- Financial Calculus, Università del Piemonte Orientale, since 2000.

Graduate Level

- Foundations of Business Analytics, Università del Piemonte Orientale, 2016-17 (in Italian).
- Risk Analysis, Cass Business School, MsC in Quantitative Finance and Msc in Mathematical Finance & Trading, since 2012.
- Financial Computing, Università del Piemonte Orientale, 2010 (in Italian).
- Quantitative Finance, Università del Piemonte Orientale, since 2008 (in Italian).
- Asset Allocation, Università del Piemonte Orientale, since 2009 (in Italian).
- Quantitative Methods for Business, Università del Piemonte Orientale, 2008 (in Italian).
- Fixed Income (Advanced Methods), Università Bocconi, since 2005.
- Portfolio Theory, Università del Piemonte Orientale, 2000-2007, and Università di Florence, 1997-2000 (in Italian).
- Derivatives, Università del Piemonte Orientale, 2000-2007, 2009 (in Italian).

Master Level

- Financial Statistics, Università Bocconi, Master in Quantitative Finance, 2001-2010.
- Numerical Methods for Derivatives, Università Bocconi, Master in Quantitative Finance, since 2001.
- Energy Derivatives, Università Bocconi, Master in Quantitative Finance, 2002-2006.
- Interest Rate Models and Fixed Income, Master in Finance, Collegio Carlo Alberto, Università di Torino.
- Theory of Finance, Università Bocconi, Master in Economics, 1999 to 2002.
- Fixed Income Arbitrage and Trading, Cass Business School, MsC in Mathematical Finance & Trading, 2011.

PhD Level

- A course on Option Pricing, June 2016, PhD in Mathematical Finance and Statistics, U. Milano Bicocca.

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Executive Level

- Energy Derivatives, ENEL, Rome, in house course, 2012.
- Modeling, Pricing and Risk Management of Energy Position, Marcus Evans, London, three editions in 2009-2010.
- Financial Calculus, Executive Course in the Programme Energy Finance, MIP Politecnico di Milano-Edison, 2011 & 2012.
- Risk Management, Executive Course in the Programme Quantitative Asset Allocation, MIP Politecnico di Milano, February 2007 and 2008.
- Monte Carlo Simulation and Option Pricing, Executive Course in the Programme Energy Finance e Commodity Trading, MIP Politecnico di Milano, 2006 2007 and 2008.
- Energy Derivatives, SDA Bocconi, 2004 and 2005.

GRANTS

- 2013: Grant by Polo ICT for a research project on *SmartFASI: Financial Advisory Smart Services Infrastructure*. The project has received a financing of more than 300,000 Euros.
- 2009: Grant by Centro Studi Carefin of U. Bocconi for a research project on *New Efficient Frontier: can structured products really improve the risk return profile?* (3,000 Euros).
- 2008: Grant by CRT Foundation for a Project on Technological Innovation in Finance (50,000 Euros).
- 2006: Grant by Italian Ministry of Research for a project on Credit Risk (60,000 Euros).
- 2004: Grant by Italian Ministry of Research for a project on Market Risk (55,000 Euros).

ACADEMIC PUBLICATIONS

Articles

1. 'General closed-form basket option pricing bounds', with R. Caldana, A. Gnoatto and M. Grasselli (2016), *Quantitative Finance* (2016), 16(4), p.535-554.
2. 'Spitzer identity, Wiener-Hopf factorization and pricing of discretely monitored exotic options', with G. Germano and D. Marazzina, in *European Journal of Operational Research* (2016), 251(1), p.124-134.
3. 'General Optimized Lower and Upper Bounds for Discrete and Continuous Arithmetic Asian Options', with I. Kiriakou, to appear in *Mathematical Methods of Operations Research*.
4. 'Counterparty credit risk in a multivariate structural model with jumps', with L. Ballotta in *Finance*, 2015, 36(1), p.39 - 74.
5. 'Correction: Exchange Option under Jump-diffusion Dynamics' with Caldana R, Gerald H. L. Cheangb and Carl Chiarella, to appear in *Applied Mathematical Finance*, 2015, 22(1), p.99-103.
6. , 'Pricing exotic derivatives exploiting structure', with Debora Sesana and Daniele Marazzina, *European Journal of Operations Research*, 236(1), p.369-381, 2014.
7. "A general closed-form spread option pricing formula" with Ruggero Caldana (U. del Piemonte Orientale), *Journal of Banking and Finance*, 37(12), p.4893-4906, December 2013.
8. "Sovereign Credit Risk in a Hidden Markov Regime-Switching Framework. Part 2: Empirical Analysis" with L. Potgieter (Cass Business School), *Capco Institute Paper Series on Risk*, Volume 38, July 2013.
9. "Sovereign Credit Risk in a Hidden Markov Regime-Switching Framework. Part 1: Methodology" with L. Potgieter (Cass Business School), *Capco Institute Paper Series on Risk*, Volume 37, April 2013.
10. "Pricing Credit Derivatives in a Wiener-Hopf Framework", with D. Marazzina (Politecnico di Milano) and G. Germano (U. del Piemonte Orientale) Topics in Numerical Methods for Finance, *Springer Proceedings in Mathematics & Statistics*, Volume 19, 2012, pp 139-154.

11. "Pricing Discretely Monitored Asian Options by Maturity Randomization", with Daniele Marazzina (U. Piemonte Orientale) and M. Marena (U. di Torino), *SIAM J. Finan. Math.*, Vol. 2 (2011), pp. 383-403

12. "Z-Transform and preconditioning techniques for option pricing", with D. Marazzina (Politecnico di Milano), M. Marena (U. di Torino) and M. Ng (Hong Kong Baptist University), *Quantitative Finance* Volume 12, Issue 9, 2012, DOI:10.1080/14697688.2010.538074.

13. "Option Pricing, Maturity Randomization and Grid Computing", with D. Marazzina (Politecnico di Milano) and M. Marena (U. di Torino), *Parallel Computing*, Vol. 36-7 (2010) and Preprint in Quaderni del Dipartimento SEMeQ 24/07, November 2007.

14. "The Wiener-Hopf Technique and Discretely Monitored Path-Dependent Option Pricing", with Ross Green (University of Manchester, UK) and David Abrahams (University of Manchester, UK), *Mathematical Finance*, Volume 20 Issue 2 (April 2010), 259 - 288.

15. "Functional Clustering and Linear Regression for Peak Load Forecasting", with A. Goia (U. Piemonte Orientale) and C. May (U. Piemonte Orientale), accepted for publication in *International Journal of Forecasting*, Preprint in Quaderni del Dipartimento SEMeQ nr. 05/08, May 2008.

16. "Pricing Discretely Monitored Asian Options under Lévy processes", with Attilio Meucci (Lehman Brothers, New York), Sept. 2007, *Journal of Banking & Finance*, Volume 32, Issue 10, October 2008, Pages 2076-2088

17. "A Note on the Analytical Pricing of Commodity Asian-Style Options under Discrete Monitoring", with A. Roncoroni (ESSEC Business School) and M. Marena (U. di Torino), *Journal of Banking & Finance*, Volume 32, Issue 10, October 2008, Pages 2033-2045

18. "Pricing Financial Claims Contingent upon an Underlying Asset Monitored at Discrete Times", with Ross Green (University of Manchester, UK) and David Abrahams (University of Manchester, UK), *Journal of Engineering Mathematics*, Volume 59, Number 4, December, 2007 Pages 373-384.

19. "Discrete Extrema of Brownian Motion and Pricing of Exotic Options" with Colin Atkinson (Imperial College, UK), *Journal of Computational Finance*, vol. 10, Number 3, Spring 2007. Preprint in the series Quaderni del Dipartimento SEMEQ, n. 86, Ottobre 2004.

20. "An Exact Analytical Solution of Discrete Barrier Options", with D. Abrahams (University of Manchester, UK) and C. Sgarra (Politecnico di Milano), *Finance and Stochastics 1-26, 2006*. Preprint in the series Quaderni del Dipartimento SEMEQ, n. 75, April 2004.

21. "Analysis of Quadrature Methods for Pricing Discrete Barrier Options" with M.C. Recchioni (Università di Ancona), in *Journal of Economics Dynamics and Control*, Vol. 31, Number 3, 2007. Preprint n. 2001/119, Sept. 2001 of the Financial Options Research Centre, U. of Warwick with the title "*Numerical Valuation of Discrete Barrier Options*".

22. "Pricing Asian options via Fourier and Laplace Transforms", *Journal of Computational Finance*, vol. 7, Number 3, Spring 2004. Preprint in the series Quaderni del Dipartimento SEMEQ, n. 46, 2002, with the title "A Note on Pricing Asian Options with Transform Method".

23. "Assessing Views", with Attilio Meucci (RVI Fund), *Risk,*Vol. 13, no. 3, march 2003, Risk Magazine, Special Report on Management for Investors S17-S20. Preprint in the series Quaderni del Dipartimento SEMEQ, n. 50, 2003. Reprinted in *RiskItalia*, October 2003 and in the Volumes *The Risk Annual: Technical Papers from the Cutting Edge Section of Risk*, edited by Nicholas Dunbar, May 2004, RiskBooks ed. and in *Portfolio Management* ed. by B. Scherer, RiskBooks Publications, 2008.

24. "Dynamic Value at Risk Measures under Optimal and Suboptimal Portfolio Policies", with E. Luciano (Università di Torino), *European Journal of Operational Research*, 2001, vol. 135, pp. 249-269.

25. "Pricing of Occupation Time Derivatives: Continuous and Discrete Monitoring", with A. Tagliani (Università di Trento), *Journal of Computational Finance*, vol. 5, n. 1, fall 2001, pp. 1-37.

26. "An Accurate Valuation of Asian Option using Moments" with A. Tagliani (Università di Trento), *International Journal of Theoretical and Applied Finance*, Vol. 5, no. 2, pp. 147-69, 2002.

27. "Corridor Options and Arc-Sine Law", *The Annals of Applied Probability*, vol. 10, no. 2, pp. 634-663, 2000.

28. "Valuation of Exotic Options using Moments", with M. D'Amico (Università Bocconi), and A. Tagliani (Università di Trento), *Operational Research, an International Journal*, special issue on Computational Finance, may-august 2002, Vol.2, no. 2, pp. 157-186.

29. "Practical Problems in the Numerical Solution of PDE's in Finance", with A. Tagliani (Università di Trento) and S. Sanfelici (Università di Parma), *Rendiconti per gli Studi Economici Quantitativi*, pp. 105-132, 2002.

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30. "Handbook of Multi-Commodity Markets and Products: Structuring, Trading and Risk Management", with Andrea Roncoroni and Marc Cummins, March 2015, Wiley Finance.

31. "Implementing Models in Quantitative Finance: Methods and Cases", with Andrea Roncoroni (Essec) January 2008, Springer Finance.

Chapter of Books

32. "Introduction to Default Risk and Counterparty Credit Modelling", with Laura Ballotta and M. Marena, in Managing Energy Price Risk: 4th Edition, edited by Vincent Kaminski, Risk Book Publications, to appear in February 2016.

33. "Introduction to Portfolio Value at Risk", with Laura Ballotta, , in Managing Energy Price Risk: 4th Edition, edited by Vincent Kaminski, Risk Book Publications, to appear in February 2016.

34. "Introduction to Value at Risk", with Laura Ballotta, , in Managing Energy Price Risk: 4th Edition, edited by Vincent Kaminski, Risk Book Publications, to appear in February 2016.

35. "An Introduction to Stochastic Calculus with Matlab examples' with Laura Ballotta, in Andrea Roncoroni, Gianluca Fusai, Mark Cummins (ed.), Handbook of Multi-Commodity Markets and Products: Structuring, Trading and Risk Management, Wiley, ISBN 978-0-470-74524-3, 2015.

36. A Quick Review of Distributions Relevant in Finance with Matlab examples" with Laura Ballotta, in Andrea Roncoroni, Gianluca Fusai, Mark Cummins (ed.), Handbook of Multi-Commodity Markets and Products: Structuring, Trading and Risk Management, Wiley, ISBN 978-0-470-74524-3, 2015.

37. Asian options in commodity markets: structuring, pricing and hedging' with Marina Marena and Giovanni Longo in Andrea Roncoroni, Gianluca Fusai, Mark Cummins (ed.), Handbook of Multi-Commodity Markets and Products: Structuring, Trading and Risk Management, Wiley, ISBN 978-0-470-74524-3, 2015.

38. 'Pricing commodity swap with counterparty credit risk' with Marina Marena and Chiara Quaglini in Andrea Roncoroni, Gianluca Fusai, Mark Cummins (ed.), Handbook of Multi-Commodity Markets and Products: Structuring, Trading and Risk Management, Wiley, ISBN 978-0-470-74524-3, 2015.

39. "Lookback Options", invited item in Encyclopedia of Quantitative Finance, ed. by Rama Cont, Wiley, to be published in 2010.

40. "Corridor Options", invited item in Encyclopedia of Quantitative Finance, ed. by Rama Cont, Wiley, to be published in 2010.

41. "Levy Processes and Option Pricing by Recursive Quadrature", with Marina Marena (U. di Torino, Giovanni Longo (U. del Piemonte Orientale) and Cristina Recchioni (U. Politecnica delle Marche). Chapter in the book Economic Dynamics: Theory, Games and Empirical Studies, ed. by Chester W. Hurlington, ISBN: 978-1-60456-911-7

Ph.D. Thesis

42. "Applications of Laplace Transform for Evaluating Occupation Time Options and Other Derivatives", *PH.D. Thesis*, U. of Warwick, 2001.

43. "Inflation Targeting and Term Structure of Interest Rates", *Doctorate Thesis*, 1994-95, Università di Brescia, (in Italian).

Other Publications

44. "Grid Based Full Portfolio Revaluation for VaR Computation", with al., *in Proceedings of Science* 1st International Workshop on Grid Technology for Financial Modeling and Simulation, 3-4 February 2006, Palermo.

45. "Value at Risk: a Comparison between Delta-Gamma Approximation and Monte Carlo Simulation using a Grid Architecture", with G. Longo (U. Piemonte Orientale) and M. Marina (U. di Torino), ChartAgeos, n. 1, May 2006. (In Italian). (In Italian)

46. "Functional Regression Tools for Peak Loading Forecasting", with Aldo Goia (U. Piemonte Orientale) and Caterina May (U. Piemonte Orientale) presented at CLADAG 2005 (Conferenza della CLAssification and Data Analysis Group of the Italian Statistical Society), Parma, and Conference on Risk Measurement and Control, Energy Session, Roma, June 2004. w.p.

47. "Pricing of Implied Volatility Derivatives", with E. Amerio (INSEAD) and A. Vulcano (Università Bocconi, now at Lehman Brothers Quantitative Team), FORC preprint n. 2003/119, 2003, University of Warwick.

48. "Probabilistic Techniques for Contingent Claims Evaluation", with G. Longo, M. Marena and A. Vulcano, *Proceedings of Conference on Computational Finance*, Auronzo, 2002.

49. "Discretely Sampled Asian Options - Part I: the Model and the Numerical Analysis", with A. Tagliani (U. di Trento), *Proceedings XXIII Amases Conference*, Università della Calabria, 1999.

50. "Introduction to Brownian Motion and its Financial Applications", *Financial Engineering: Principles and applications in the debt and currency markets*, pagg. 104-116, ed. by Luca Erzegovesi, Trento 1998. (In Italian)

51. "Term Structure and Inflation Targeting", *Proceedings XX A.M.A.S.E.S Conference*, Urbino, September 1996, (In Italian).

52. "The Term Structure of Interest Rates" and "Mathematical and Statistical Appendix ", chapters in the book *Forward and Futures on bond*, ed. By Luca Erzegovesi, ed. Il Sole 24h Libri, agust 1993, (In Italian).

53. "GARCH Models and Volatility Forecast in the Option Market", Dissertation for the degree of Master in Statistics and Operational Research, Dept. of Mathematics, University of Essex, Sept. 1994.

54. "An Observation on Two Moment Decision Models and Expected Utility Maximization", in *Proceedings of the XVI Amases* Meeting, Treviso, Italy, October 1992. (In Italian)

Working Papers

55. "Quantitative Assessment of Common Practice Procedures in the Fair Evaluation of Insurance Contracts", with. A. M. Gambarom R. Casalini and A. Ghilarducci.

56. "Understanding Stochastic Volatility", with L. Ballotta, w.p.

57. "Analysis of Calibration Risk for Exotic Options trough a Resampling Technique" with M. Marena and M. Materazzi, w.p.

58. "Integrated Structural Approach to Counterparty Credit Risk with Dependent Jumps", with L. Ballotta and D. Marazzina. Available at SSRN: http://ssrn.com/abstract=2706416. Submitted.

59. "Approximated Pricing of Swaptions in General Interest Rate Models", with A. Gambaro and R. Caldana. Available at Available at SSRN: http://ssrn.com/abstract=2660696. Submitted.

60. "Multivariate Lévy Models by Linear Combination: Estimation", with A. Loregian and L. Ballotta. Available at SSRN: http://ssrn.com/abstract=2597049. Submitted.

61. "New Efficient Frontier: can structured products really improve the risk return profile¿', with G. Zanotti. CAREFIN Research Paper No. 28/2010. Available at SSRN: http://ssrn.com/abstract=1802582. Submitted.

62. "Default Risk Premium in Credit and Equity Market: A New Approach for Structural Model Estimation, with A. Beber and R. Corvino. Available at SSRN: http://ssrn.com/abstract=2611984.

63. "Pitfalls in multivariate stochastic volatility models", with M. Marena w.p., in progress.

64. "Pricing of interconnecting options in the power market", with R. Caldana and A. Roncoroni, w.p., in progress.

65. "Estimation Risk and Option Pricing", w.p. with M. Marena.

66. "Pricing Hybrid Products via Fourier Transforms", with C. Atkinson (Imperial College) and M. Marena (U. di Torino), w.p., in progress.

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1. Savina Kazantzaki, Dept. of Mathematics, Imperial College, Londra, UK, Ph.d. Thesis on "Aspects of Exotic Option Pricing Theory", Dec. 2006.
2. Efrem Bonfiglioli, Dottorato di Ricerca in Matematica per lAnalisi dei Mercati Finanziari XXI Ciclo, U. Milano Bicocca, Milano, Ph.d. Thesis on "Financial applications of asymmetric double exponentially distributed jump process", July 2009.
3. Marius Ayou Bene, Dottorato di Ricerca in Matematica per lAnalisi dei Mercati Finanziari XXI Ciclo, U. Milano Bicocca, Milano, Ph.d. Thesis on "CDO Pricing: Portfolio Loss Distribution and Correlation Modelling", Feb. 2009.
4. Roberto D'Ercole, Dottorato di Ricerca in Matematica per lAnalisi dei Mercati Finanziari XXI Ciclo, U. Milano Bicocca, Milano, Ph.d. Thesis on "Extension of Functionals and Convex Risk Measures to Orlicz Spaces", Feb. 2009.
5. Marcelo Labre, Dept. of Mathematics, Imperial College, London, UK, Ph.d. Thesis on "Pricing Contingent Claims on Credit and Carbon on Single and Multiple Underlying Assets", June 2010.
6. Ioannis Kyriakou, Dept. of Finance, Cass Business School, London, UK, Ph.d. Thesis on "Efficient valuation of exotic derivatives with path-dependence and early-exercise features", November 2010.
7. Bo Zhao, Volatility Modelling in Continuous Time, Faculty of Finance, Cass Business School, 2013.
8. Gabriele Luigi Sarais, Pricing Inflation and Interest Rates Derivatives with Macroeconomic Foundations, Imperial College London, Department of Mathematics, 2015.
9. Emmanouil N. Karimalis, Essays in Multivariate Modelling in Finance, Cass Business School, 2015.

POST-DOC AND PH.D. STUDENTS

1. Anna Maria Gambaro (Ph.D.), Affine models and applications to swaption pricing and CVA computation. Universitá Milano Bicocca. Expected graduation: April 2017.
2. Alberto Santangelo (Ph.D.), Stochastic Temperature Models and evaluation of Gas Storage Contracts. Expected graduation: April 2017.
3. Raffaele Corvino (Ph. D.), Modelling Default Risk via Structural Models. Cass Business School. Expected graduation: October 2017.
4. Ruggero Caldana (Ph.D.), Pricing of Spread Options, 2012. Universitá Piemonte Orientale, (completed).
5. Debora Sesana (Post-Doc), Numerical Methods for Finance, 2010. Universitá Piemonte Orientale, (completed).
6. Guido Germano (Post-Doc), Credit Risk and Contagion, 2009. Universitá Piemonte Orientale, (completed).
7. Daniele Marazzina (Post-Doc), Finite Elements and Option Pricing, 2007. Universitá Piemonte Orientale, (completed).
8. Gabriele Cardi (Ph.D.), Option Pricing and Lévy Processes, 2005. Universitá Milano Bicocca, (completed).
9. Antonio Vulcano (Ph.D.), A Stochastic Implied Volatility Model, 2005. Universitá of Trieste, (completed).
10. Marina Santacroce (Post-Doc), Lévy Processes, 2004. Universitá Piemonte Orientale, (completed).
11. Emanuele Amerio (Post-Doc), Implied Volatility Modeling, 2002. Universitá Piemonte Orientale, (completed).

CONFERENCE PRESENTATIONS

My papers have been presented (by myself or by my coauthors) at the following conferences

- General Optimized Lower and Upper Bounds for Discrete and Continuous Arithmetic Asian Options
  - Bachelier World Conference, July 2016, New York.
- Default Risk Premium in Credit and Equity Market: A New Approach for Structural Model Estimation

  - European Finance Association Annual Meeting, Oslo, August 17-20, 2016.
  - Greta Associati, 15th INTERNATIONAL CONFERENCE, Credit Solutions for the Real Economy: Implications for Investors, Financial Stability and Policy Design Venice, Italy, 6 - 7 October 2016.

- A Structural Model for CVA computation with wrong way risk:
  - Energy and Commodity World Conference, Paris, June 2016.
  - Nomura Centre for Mathematical Finance, Department of Mathematics, Oxford University, 28 May 2015 (invitation).
  - Finance and Stochastics seminar, Department of Mathematics, Imperial College, September 2015 (invitation).
  - EMLYON Business School, Quant 12 Workshop, 26-27th November 2015, Lyon (invitation).
  - Banca IMI, December 18th, 2015 (invitation).

- Counterparty Credit Risk with Jumps
  - Summer School on Risk Management, Rome, June 2014 (invitation).
  - Bachelier Finance Society, 8th World Congress, Brussels, 2014.

- Multivariate Levy models by linear combination: estimation, 2014 Conference - Financial Engineering and Banking Society (FEBS) Conference, University of Surrey, UK, 2014.
- Pricing Basket Options in non-Gaussian models, Bachelier Finance Society, 8th World Congress, Brussels, 2014.
- General Optimized Lower and Upper Bounds for Discrete and Continuous Arithmetic Asian Options, 8th Conference in Actuarial Science & Finance, Samos, Greece, June 2014.
- Estimation Risk and Option Pricing: Why to Use the Black-Scholes Formula, Workshop in Honor of Erio Castagnoli's 70th Birthday - Università Bocconi, Milano, 2 July 2013 (invitation).
- A Structural Model for CVA computation with wrong way risk, Prometeia, Bologna, 30 May 2013 (invitation).
- Introduction to Credit Value Adjustment, Conference on Counterparty credit risk and credit valuation adjustment: Quantitative and regulatory framework, Cass Business School, 23 January 2013.
- 6th CSDA International Conference on Computational and Financial Econometrics (CFE 2012) 1-3 December 2012, Conference Centre, Oviedo, Spain
- 3rd International Conference on Numerical Methods for Finance 2011, July 2011. *A model for defaultable bonds in a Lvy framework*.
- University of Marburg, March 2011. Invited talk on: *New Efficient Frontier: can structured products really improve the risk return profile?*.
- Cass Business School, November 15, 2010. Invited talk on: *Fast option pricing methods via Wiener-Hopf technique*.
- Università di Roma Tor Vergata, April 15-16, 2010, workshop on *Stochastic Volatility, Affine Models and Transform Methods*. Invited talk on: *Pricing exotic options with Fourier transform*.
- Università di Parma, April 14, 2010, *New results in option pricing*. Invited seminar.
- Bloomberg, New York, June 2009, *Corridor options: new and old results.* Invited seminar.
- Workshop on Financial Crisis and Quantitative Methods: Problems and Solutions, Dept. of Mathematics, Politecnico di Milano, Milan, 28 January 2009. Discussant.
- Financial Mathematics Workshop, April, 8, 2009. *Path-dependent options and randomization techniques*.
- X Workshop on Quantitative Finance, January, 28-29, 2009, *Randomization and Preconditioning Techniques for Option Pricing*.
- EFA 2008 Athens Meetings, August, 2008, *Commodity Asian Options: A Closed-Form Formula*.
- Bachelier Finance Society, Fifth World Congress, London July, 2008, *Randomization and Option Pricing*.
- 22rd IEEE International Parallel and Distributed Processing Symposium. Workshop on Parallel and Distributed Computing in Finance, Miami, April 14-18, 2008, *Option Pricing, Maturity Randomization and Grid Computing*.

- International Summer School in Risk Measurement and Control, Rome, June 11-16 2007, *Transform Methods in Finance: Pricing and Risk Management.* Invited speech.
- Frontiers in Financial Markets Mathematics, Summer School, September 2006, Università of Bologna, *Sampling Errors and Asset Allocation*. Invited speech.
- Cass Business School, London, February 5, 2006, *Beyond the Barriers: formula for discrete monitored exotic contracts.*
- 1st International Workshop on Grid Technology for Financial Modeling and Simulation, Grid in Finance 2006, Palermo 3-4 Febbraio, *Grid based full portfolio revaluation for Var computation.*
- International Summer School in "Risk Measurement and Control", Rome, June 9-17, 2005, *Pricing of Discretely Monitored Asian Options.*
- University of Marne La Valle, January 2005, *Pricing of Discretely Monitored Options*.
- Bachelier Finance Society, Third World Congress, Chicago. July 21-24, 2004, *Monte Carlo Static Replication of Barrier Options*.
- Conference on Risk Measurement and Control, Energy Session, Roma giugno 2004, *Functional regression tools for peak loading forecasting.*
- Quantitative Methods in Finance 2003 Conference, Sydney, *Pricing of implied volatility derivatives*.
- XVI Annual Warwick Options Conference, Financial Options Research Centre (FORC), University of Warwick, 25-26 September 2003, *Pricing of Implied Volatility Derivatives: a Risk Neutral Model for Market Implied Volatility*.
- Bachelier Finance Society, Second World Congress, Creta. June 12-15, 2002, *Pricing of Implied Volatility Derivatives: a Risk Neutral Model for Market Implied Volatility*.
- University of Bath, May 2001, *Corridor Options and Arc-Sine Law*.
- Quantitative Methods in Finance, 1998 Conference, Sydney, Australia, *Corridor Options and Arc-Sine Law*.
- Amases Conferences (Italian Association of Applied Mathematics to Social Sciences), 1992, 1996, 1999, 2005, 2006.

Editorial Board

Finance, the Journal of the French Finance Association, since 2015.

Ad hoc Refereeing

- 2016 European Journal of Operational Research, J. of Mathematical Finance, Energy Risk, Finance Research Letters, J. Banking and Finance;
- 2015 Journal of Futures Markets, Finance Research Letters, Mathematical Finance, Operations Research, Quantitative Finance;
- 2014: Review of Finance, Journal of Banking and Finance, American Journal of Agricultural Economics, International Journal of Theoretical and Applied Finance;
- 2013: International Journal of Economics and Finance, Entropy, Applied Mathematics and Computation, Quantitative Finance;
- 2012: Journal of Futures Markets, Mathematical Finance; Applied Mathematical Finance, Journal of Economic Dynamics and Control, Mathematical Methods of Operations Research, Communications in Statistics, European Journal of Operations Research;
- Earlier: Operations Research, Quantitative Finance, European Journal of Operational Research, Journal of Banking and Finance, Insurance & Mathematics, Mathematical Finance, Annals of Finance, Chaos, Solitons and Fractals, Computational Economics, Decisions in Economics and Finance, European Journal of Finance, Geneva Papers on Risk and Insurance, International Journal of Theoretical and Applied Finance, Journal of Computational Finance, Journal of Futures Markets, Statistics and Probability Letters.

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- Gianluca has acted as consultant in the private and public sector. He has also been an expert witness in trials on interest rate swaps.

LANGUAGES

Italian, English, French

COMPUTING SKILLS

C, MATLAB, VBA and Mathematica

SPORTS

Cycling: Gianluca is a passionate cyclist (road bike). He has climbed the two highest cols in Europe (Iseran and Stelvio, both sides) and the most classical ones in Italy such as Gavia (several times), Pordoi, Marmolada, Sella, Spluga, Gran San Bernardo, Mortirolo, Croce Domini, Tonale, Mottarone.

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