CURRICULUM VITAE

Stefano Maria Iacus

Department of Economics, Business and Statistics University of Milan Via Conservatorio 7, I-20122, Milan

Personal

Born on 27-June-1968 in Rome, Italy; Citizen of Italy; two children: Ludovico and Lucia.

Current position

Associate professor (confermato/tenured/W2 Professor) in "Probability and Mathematical Statistics", University of Milan, Italy. Currently at the Department of Economics, Management and Quantitative Methods, Faculty of Political Sciences, University of Milan, Italy.

Current and former appointments

Associate editor of the *Journal of Statistical Software* for the years 2004-2006 and 2011 – present.

Associate editor of Journal of Statistical Planning and Inference, 2012 - present.

Editorial Board of the International Journal of Applied Nonlinear Science, 2012 - present.

Member of the R Core Team, the international group of developers of the R statistical environment, since 2000 (http://www.R-Project.org)

Director of the master degree program (Laura Magistrale) on "International Finance and Economics", University of Milan, since february 2013.

Co-founder and board member of the spin-off company of the University of Milan "Voices from the Blogs" for advanced text mining and analysis of social media content.

IMS Group Editor for the Institute of Statistical Mathematics (2006-2009).

Data Base Manager for the *Current Index to Statistics* of ASA (American Statistical Association) and IMS (Institute of Mathematical Statistics) for the term 2007-2009.

President of the Informatics Committee and director of the computational laboratories at the Faculty of Political Sciences, Milan, 2008 – present.

Coordinator of Computational Finance unit at the research center AdDAMS (Advanced Applied Mathematical and Statistical Sciences) (http://siren.dsi.unimi.it/ADAMSS).

Board member of the Scientific Committee of CTU (Center for E-Learning and Multimedia Production, University of Milan).

Managing Editor of the UNIMI Research Papers in Economics, Business and Statistics, The Berkeley Electronic Press.

Visting periods

Visiting associate professor at the Graduate School of Mathematics, University of Tokyo, Japan. (15-Jul-2012 to 28-Jul-2011).

Visiting associate professor at the Graduate School of Mathematics, University of Tokyo, Japan. (30-Aug-2011 to 1-Oct-2011).

Visiting associate professor at the Graduate School of Mathematics, University of Tokyo, Japan. (1-Nov-2010 to 8-Jan-2011).

Visiting professor, Laboratoire de Statistique et Processus, Université du Maine, Le Mans, France. (27-Sep-2010 to 6-Oct-2010).

Visiting professor, Department of Mathematics, University of Copenhagen, Denmark. (22-Sep-2010 to 24-Sep-2010).

Visiting professor, at Fraunhofer ITWM (Institut für Techno- und Wirtschaftsmathematik). Kaiserslautern, Germany. (14-Sep-2010 to 19-Sep-2010).

Visiting associate professor at the Graduate School of Mathematics, University of Tokyo, Japan. (31-Nov-2008 to 1-Jan-2009).

Visiting associate professor at the Graduate School of Mathematics, University of Tokyó, Japan. (1-Dec-2007 to 30-Dec-2007).

Visiting associate professor at the Institute of Statistical Mathematics, Tokyo (4-Sep-2006 to 2-Nov-2006).

Visiting associate professor at the Graduate School of Mathematics, University of Tokyo, Japan. (5-Nov-2006 to 3-Jan-2007).

Education

Doctorat en Mathématiques, Option Statistiques (Dec 1999)

Université du Maine, Francia (grade "tres honorable"), supervisor Youry Kutoyants.

PhD in Statistics (Dec 1998)

University of Padua, Italy, supervisior Alessandra Salvan.

Visiting student Aathus University, Denmark (Apr-Sep 1998)

supervisor Ole Barndorff-Nielsen, Socrates fellowship

Visiting student, Univerisité du Maine, Le Mans, France (Nov '96 - March 2000)

for non-consecutive 12 months at Laboratoire de Statistiques et Processus, Université du Maine.

Degree in Statistics (July 1995)

Diploma in Statistical Sciences, magna cum laude ("110/110 e lode"), supervisor of degree thesis Enzo Orsingher.

Professional Societies

Elected Member of the International Statistical Institute (ISI) and ordinary member of American Mathematical Society (AMS), Institute of Mathematical Statistics (IMS), International Association for Statistical Computing (IASC), Bernoully Society.

Major research interests

Statistics: computational statistics; matching methods for causal inference; simulation techniques; sentiment analysis and text analytics; inference for stochastic processes;

Probability: diffusion processes; processes driven by hyperbolic equations; stochastic resonance; iterated functions systems (IFSs), mathematical finance;

Other interests and activities

- I am a member of the R-Core Team, international group of developers of the R statistical environment (http://www.R-project.org). I'm particular in charge of Mac OS X support for this system. The R software is used in academia as well as in industry by thousands of people around the world. I have also written several statistical packages for the R statistical environment.
- Since december 2000, I'm member of the board for the Graduate School of Statistics (Dottorato di Statistica) at University of Milan.
- I am a reviewer for the MathSci.net service of AMS and have served as referee for the following journals:
 - Statistics, Probability, Mathematics, Information Theory: Annals of Statistics, Journal of the Royal Statistical Society, Journal of Multivariate Analysis, Statistical Inference for Stochastic Processes, ESAIM: Probability and Statistics, Information Sciences, Statistics and Probability Letters, Applied Sciences, Applied Mathematics Letters, Bulletin of the Korean Mathematical Society, Metron, Symmetry, Stochastics, Journal of Statistical Software, Pattern Recognition Letters, Indian Journal of Mathematics, Statistical Methods and Applications, Journal of Statistical Computation and Simulation, International Journal of Image Processing, Mathematical & Computer Modelling;
 - Finance, Biology, Political Science and other fields: Journal of Computational Finance. Computational Economics, BioMedical Statistics and Clinical Epidemiology, American Journal of Political Science, Comparative Political Studies, Canadian journal of Forest Research;
- Since May 2003, I organize yearly an international school called "Computational and statistical aspects of microarray data analysis" (http://www.economia.unimi.it/marray/).

co-sponsorized by many international societies including ISI/IASC, SIS (Italian Statistical Society), SISMEC (Italian Society of Epidemiology and Medical Statistics), IBS (Italian Biometric Society). This course has attendants from everywhere in the world (Europe, Asia and Americas). This is related to my activity in the Bioconductor Project for statistical microarray analysis (http://www.Bioconductor.org). Faculty of the course include lecturers from EBML, EBI, Harvard University and many other international top research centers.

- Along with other researchers in economics and political science. I'm currently running a project for blog sentiment analysis called *Voices from the Blogs* (the web site is available at http://www.voicesfromtheblogs.com). This project, VfB in short, is intended to monitor the opinion of the italian bloggers and social media on actuality and hot topics for the italian society. For this project I've developed text analytics tools as well as a crawler for public data and the engine for automated statistical analysis.
- Co-founder, on date 12/12/12, of the spin-off company of the University of Milan named Voices from the Blogs S.r.l. (after the same project above) which offers innovative services for monitoring and analyzing public opinions using advanced text mining and sentiment analysis solutions.
- Since november 2009 I'm the board of evaluators of scientific project funding of the Swiss National Science Foundation (SNSF) for the topic "Finance".
- I have been in charge of running the PAS (Probability Abstract Service) and also been Associate Web Editor for Institute of Mathematical Statistics (http://www.imstat.org) Web site.
- I've been advisor of several master degree students in Mathematical Finance, and co-advisor of a PhD candidate in statistics who worked on inference for random flights. I've been advisor of a Post-doc thesis on inference and simulation of CO-GARCH processes.
- I'm currently involved in an international project called **Yuima**, founded by the Japan Science Technology agency. This project is about computational aspects of simulation and inference for stochastic processes, where the mainstream applications are (but not limited) to Finance. It is intended to provide a bridge from mathematical theory to ready-to-use tools. Along with Nakahiro Yoshida (Tokyo University) I serve as coordinator for this project which involves researchers from both Japan and Europe.
- In 2011 I've received a bi-annual grant on computational statistics for 166.000 Euros from the Italian Ministry of Education and Research (MIUR) to develop both the statistical theory and the computational implementation of simulation and inference for CO-GARCH models. This grant was also used to fund a PostDoc position at the University of Milan.

Publications

I've published books and papers both on my main stream of research as well as on other fields like biology and the social sciences. I like interdisciplinary collaborations.

Books & Book Chapters

- 1. Ceron, A., Curini, L., <u>Iacus, S.M.</u> (2013) Social Media e Sentiment Analysis: L'evoluzione dei fenomeni sociali attraverso la Rete, Sx1 Springer for Innovation, Springer, ISBN: 978-88-470-5531-5 (in italian).
- 2. <u>Iacus, S.M.</u> (2013) An introduction to R, Book Chapter in *Modern Industrial Statistics: with applications in R, MINITAB and JMP, 2nd Edition*, Kennett, R., Zacks, S., Amberti, D. eds, John Wiley & Sons, Ltd., Chichester, ISBN: 978-1-118-45606-4.
- 3. Ceron, A., Curini, L., <u>Iacus, S.M.</u>, Mattioni, R., Porro, G. (2012) #Milano-Brianza in un tweet: lavoro, politica, partecipazione, Guerini e Associati, Milan, ISBN: 8862504594 (in italian).
- 4. <u>Iacus, S.M.</u> (2012) An introduction to R, Book Chapter in *Modern Analysis of Customer Surveys: with applications using R*, Kennett, R.S., Salini, S. eds, John Wiley & Sons, Ltd., Chichester, pages 457–497, ISBN: 978-0-470-97128-4.
- 5. <u>Iacus, S.M.</u> (2011) Option Pricing and Estimation of Financial Models with R, John Wiley & Sons, Ltd., Chichester, 472 page, ISBN: 978-0-470-74584-7
- 6. <u>Iacus, S.M.</u> (2008) Simulation and Inference for Stochastic Differential Equations: with R examples, Springer Series in Statistics, Springer NY, 300 pages, ISBN: 978-0-387-75838-1.
- 7. <u>Iacus, S.M.</u>, Masarotto, G. (2007) *Laboratorio di statistica con R*, seconda edizione, McGraw-Hill Companies Italia, 396 pages, ISBN: 978-8-838-66369-7. (in italian, book on computational statistics)
- 8. <u>Iacus, S.M.</u> (2006) *Statistica*, McGraw-Hill Companies Italia, 252 pages, ISBN: 978-8-838-66315-4. (in italian, didactic publication)
- 9. <u>Iacus, S.M.</u>, La Torre, D., Porro, G. (2001) *Elementi di matematica per l'economia e la statistica*, 153pp, CUSL, Milano, ISBN 88-8132-113-0. (in italian, didactic publication)

Recent working papers under review

- 10. Canova, L., Curini, L. <u>Iacus, S.M.</u> (2013) Measuring Psychospread: idiosyncratic happiness of Italian citizens through the analysis of their tweet. Available at http://services.bepress.com/unimi/statistics/art59/.
- 11. <u>Iacus, S.M.</u>, G. King (2012) How Coarsening Simplifies Matching-Based Causal Inference Theory. Available at http://gking.harvard.edu/files/multi.pdf.
- 12. <u>Iacus, S.M.</u>, Porro, G. (2012) The evolution of regional unemployment in the EU. An analysis via the Gompertz diffusion process, *UNIMI Research Papers in Economics, Business, and Statistics.*, n.45. Available at http://services.bepress.com/unimi/economics/art45.
- 13. Brouste, A., Fukasawa, M., Hino, H., <u>Iacus, S.M.</u>, Kamatani, K., Koike, Y., Nomura, R., Shimizu, Y., Uchida, M., Yoshida, N. (2011) The YUIMA Project: a Computational Framework for Simulation and Inference of Stochastic Differential Equations.

14. <u>Iacus, S.M.</u> (2010) On Lasso-type estimation for dynamical systems with small noise, *UNI-MI - Research Papers in Economics, Business, and Statistics.*, n.49. Available at http://services.bepress.com/unimi/statistics/art49.

Selected papers

- 15. <u>Iacus, S.M.</u>, Porro, G. (2013) Does European Monetary Union make ination dynamics more uniform?, *Applied Economics Letters*. Preprint available at http://services.bepress.com/unimi/economics/art51.
- 16. De Gregorio, A., <u>Iacus, S.M.</u> (2013) On a family of test statistics for discretely observed diffusion processes, *Journal of Multivariate Analysis*, **122**, 292–316. DOI: http://dx.doi.org/10.1016/j.jmva.2013.08.002.
- 17. Ceron, A., Curini, L., <u>Iacus, S.M.</u>, Porro, G. (2013) Every tweet counts? How sentiment analysis of social media can improve our knowledge of citizens political preferences with an application to Italy and France, *New Media & Society*, april 2013. doi:10.1177/1461444813480466.
- 18. Brouste, A., <u>Iacus, S.M.</u> (2012) Parameter estimation for the discretely observed fractional Ornstein-Uhlenbeck process and the Yuima R package. Accepted for publication on *Computational Statistics*. DOI: doi:10.1007/s00180-012-0365-6.
- 19. <u>Iacus, S.M.</u>, Yoshida, N. (2012) Estimation for the change point of the volatility in a stochastic differential equation, *Stochastic Processes and Their Applications*, **122**, 1068–1092. DOI: 10.1016/j.spa.2011.11.005.
- 20. <u>Iacus, S.M.</u>, King, G., Porro, G. (2012) Causal Inference Without Balance Checking: Coarsened Exact Matching, *Journal of Political Analysis*, **20**(1), 1–24, DOI: 10.1093/pan/mpr013
- 21. De Gregorio, A., <u>Iacus, S.M.</u> (2012) Adaptive LASSO-type estimation for ergodic diffusion processes, *Econometric Theory*, **28**, 1–23. DOI: doi:10.1017/S0266466611000806.
- 22. <u>Iacus, S.M.</u>, King, G., Porro, G. (2011) Multivariate Matching Methods That are Monotonic Imbalance Bounding, *Journal of American Statistical Association*, **106**(493), 345–361, DOI: 10.1198/jasa.2011.tm09599
- 23. De Gregorio, A., <u>Iacus, S.M.</u> (2011) Least-squares change-point estimation for the telegraph process observed at discrete times, *Statistics*, **45**(4), 349–359,
 - DOI: 10.1080/02331881003769022/
- 24. Ballarino, G., Checchi, D., Fiorio, C., <u>Iacus, S.M.</u>, Leonardi, M., Porro, G. (2011) La valutazione dellefficacia del "sistema delle doti" della Regione Lombardia: modelli statistici e criticità nella progettazione, Rassegna Italiana di Valutazione, 15, 39–61, DOI: 10.3280/RIV2011-049004. (in italian)
- 25. <u>Iacus, S.M.</u>, Yoshida, N. (2010) Numerical analysis of volatility change point estimators for discretely sampled stochastic differential equations, *Economic Notes*, **39**(1/2), 107–127.

- 26. De Gregorio, A., <u>Iacus, S.M.</u> (2010) Divergences Test Statistics for Discretely Observed Diffusion Processes, *Journal of Statistical Planning and Inference*, **140**, 1744-1753.
- 27. De Gregorio, A., <u>Iacus, S.M.</u> (2010) Clustering of discretely observed diffusion processes. *Computational Statistics & Data Analysis*, **54**, 598–606.
- 28. De Gregorio, A., <u>Iacus, S.M.</u> (2009) On Rényi information for ergodic diffusion processes. *Information Sciences*, **179**(3), 279–291.
- 29. <u>Iacus, S.M.</u>, Uchida, M., Yoshida, N. (2009) Parametric estimation for partially hidden diffusion processes sampled at discrete times, *Stochastic Processes and Their Applications*, 119. 1580–1600.
- 30. Blackwell, M., <u>Iacus, S.M.</u>, King, G., Porro, G. (2009) cem: Coarsened exact matching in Stata, *The Stata Journal*, **9**(4), 524-546.
- 31. <u>Iacus, S.M.</u>, Porro, G. (2009) Teachers' evaluations and students' achievement: a 'deviation form the reference' analysis, *Education Economics*, 1-21
- 32. <u>Iacus, S.M.</u>, King, G., Porro, G. (2009) cem: Software for Coarsened Exact Matching. *Journal of Statistical Software*, **30**(9), 1–27.
- 33. <u>Iacus, S.M.</u>, Porro, G. (2009) Random Recursive Partitioning: a matching method for the estimation of the average treatment effect, *Journal of Applied Econometrics*, **24**, 163–185.
- 34. De Gregorio, A., <u>Iacus, S.M.</u> (2008) Least squares volatility change point estimation for partially observed diffusion processes, *Communications in Statistics, Theory and Methods*, **37**(15), 2342–2357.
- 35. <u>Iacus, S.M.</u>, Yoshida, N. (2008) Estimation for the discretely observed telegraph process. Theory of Probability and Mathematical Statistics, 78, 33–43.
- 36. De Gregorio, A., <u>Iacus, S.M.</u> (2008) Parametric estimation for the standard and geometric telegraph process observed at discrete times, *Statistical Inference for Stochastic Processes*. **11**, 249–263.
- 37. <u>Iacus, S.M.</u>, Porro, G. (2008) Invariant and Metric Free Proximities for Data Matching: An R Package, *Journal of Statistical Software*, **25**(11), 1–22.
- 38. <u>Iacus, S.M.</u>, Porro, G. (2007) Missing data imputation, matching and other applications of random recursive partitioning, *Computational Statistics and Data Analysis*, **52**, 2, 773–789.
- 39. <u>Iacus, S.M.</u>, La Torre, D. (2006) IFSM representation of Brownian motion with applications to simulation, in *Math Everywhere*. *Deterministic and Stochastic Modelling in Biomedicine*, Economics and Industry, Dedicated to the 60th Birthday of Vincenzo Capasso. Aletti G., Burger M., Micheletti A., Morale D. (Eds.), Springer, NY, 115-124.
- 40. <u>Iacus, S.M.</u>, La Torre, D. (2005) A comparative simulation study on the IFS distribution function estimator, *Nonlinear Analysis Real World Applications*, **6**(5), 858–873.
- 41. <u>Iacus, S.M.</u>, La Torre, D. (2005) Approximating distribution functions by iterated function systems, *Journal of Applied Mathematics and Decision Sciences*, 9(1), 33–46.

- 42. <u>Iacus, S.M.</u>, Porro, G. (2005) Il lavoro interinale in Italia. Analisi di un caso per riflettere sulle caratteristiche dell'offerta e sul comportamento degli operatori, *Rivista di Politica Economica*, 123–215 (in italian).
- 43. <u>Iacus, S.M.</u>, La Torre, D. (2004) IFS approximations of distribution functions and related optimization problems, *Applied Sciences*, **6**(1), 27–38.
- 44. Gentleman, R., Carey, V., Bates, D., Bolstad, B., Dettling, M., Dudoit, S., Ellis, B., Gautier, L., Ge, Y., Gentry, J. Hornik, K., Hothorn, T., Huber, W., <u>Iacus, S.M.</u>, Irizarry, R., Leisch, F., Li, C., Maechler, M., Rossini, A., Sawitzki, G., Smith, C., Smyth, G., Tierney, L., Yang, J. and Zhang, J. (2004) Bioconductor: open software development for computational biology and bioinformatics, *Genome Biology*, **5**(10), R80.
- 45. <u>Iacus, S.M.</u>, Porro, G., Vezzulli, A. (2004) Temporary Agency Workers in Italy: Alternative Techniques of Classification, *Labour*, **18**(4), 699–725.
- 46. <u>Iacus, S.M.</u>, Negri, I. (2003) Estimating unobservable signal with Markovian noise induction, *Statistical Methods and Applications*, **12**(2), 153–167.
- 47. <u>Iacus, S.M.</u>, La Torre, D. (2003) Fixed point theory with an application to statistics, in *Giornate Scientifiche in ricordo di Antonio C. Capelo*, Cleup Editrice, Padova, pp 1–15.
- 48. <u>Iacus, S.M.</u>, La Torre, D. (2003) Nonparametric estimation by iterated function systems and optimization problems, in *Recent advances in optimization (Varese, 2002)*, 101–118, Datanova, Milan.
- 49. <u>Iacus, S.M.</u> (2002) Statistical analysis of stochastic resonance with ergodic diffusion noise, *Stochastics & Stochastics Reports*, **73**(3-4), 271–285.
- 50. <u>Iacus, S.M.</u> (2001) Statistic analysis of the inhomogeneous telegrapher's process, *Statistics and Probability Letters*, **55**(1), 83–88.
- 51. <u>Iacus, S.M.</u>, Kutoyants, Y. (2001) Semiparametric hypotheses testing for dynamical systems with small noise, *Mathematical Methods of Statistics*, **10**(1), 105–120.
- 52. <u>Iacus, S.M.</u> (2001) Efficient estimation of dynamical systems, *Studies in Nonlinear Dynamics and Econometrics*, **4**(4), 213–226.
- 53. <u>Iacus, S.M.</u> (2000) Semiparametric estimation of a functional of the drift coefficient for a non-homogeneous dynamical system with small noise, *Journal of Non-parametric Statistics*, 13, 129–151.
- 54. <u>Iacus, S.M.</u> (2000) Semiparametric estimation of the state of a dynamical system with small noise, *Statistical Inference for Stochastic Processes*, **3**(3), 277-288.
- 55. <u>Iacus, S.M.</u> (1997) Semiparametric estimation of a functional of the drift coefficient of a dynamical system with small noise, *Journal of the Italian Statistical Society*, **6**(2), 161–176.

Technical reports

- 56. Curini, L., <u>Iacus, S.M.</u> (2008) Analyzing party-system dynamics through spatial theory: Italy between 2006 and 2008, presented at *Società Italiana di Scienza Politica*, *XXII Convegno Annuale*, Pavia, 4-6 settembre 2008.
- 57. <u>Iacus, S.M.</u>, Negri, I. (2008) Analisi di secondo livello del questionario E-Learning CTU. Università degli Studi di Milano. Available at http://ctu.unimi.it
- 58. Checchi, D., <u>Iacus, S.M.</u>, Negri, I., Porro, G. (2004) Formazione e percorsi lavorativi dei laureati dell'Università degli Studi di Milano (II° edizione: laureati 1999) [Human capital formation and professional paths of degree students at Milan University], COSP, Università degli Studi di Milano. Available as Departmental Working Papers, n.04.2004-Aprile, http://www.economia.unimi.it
- 59. <u>Iacus, S.M.</u>. Porro, G. (2001) Occupazione interinale e terzo settore: analisi dei microdati di una società no profit di fornitura di lavoro interinale [Temporary work and non-profit: analysis of microdata from a non-profit TWA], *IRES Quaderno n.2*, IRES-Lombardia, july 2001.
- 60. <u>Iacus, S.M.</u> (2000) Note introduttive sul linguaggio R, n. 28/R, giugno 2000, *Dipartimento di Matematica F. Brioschi*, Politecnico di Milano.
- 61. <u>Iacus, S.M.</u> (1998) The van Trees Inequality for diffusion processes with small diffusion coefficient and asymptotic efficiency in a semiparametric problem, *Department of Theoretical Statistics, University of Aarhus*, research reports No. 397, June 1998.

Peer reviewed conference proceedings

- 62. <u>Iacus, S.M.</u> (2009) The Yuima Project: a computational framework for simulation and inference of SDEs with jumps, *Third International Conference on Computational and Financial Econometrics (CFE 09)*, Cyprus, October 29-31, 2009.
- 63. <u>Iacus, S.M.</u>, G.King, G. Porro (2009) Coarsened exact matching, 7° Meeting of the Classification and Data Analysis Group of the Italian Statistical Society, Catania, 9-11 Settembre, 2009.
- 64. <u>Iacus, S.M.</u> (2007) SDE: an R package for simulation and inference of stochastic differential equations, *International Workshop on Computational and Financial Econometrics*, University of Geneva, Switzerland, April 20-22, 2007.
- 65. <u>Iacus, S.M.</u>, La Torre, D. (2006) Iterated function system and simulation of Brownian motion, *useR!*, *The R User Conference*, Wirtschaftsuniversität Wien in Vienna, Austria, 15-17/06/2006.
- 66. <u>Iacus, S.M.</u>, Ligges, U., Urbanek, S. (2006) R on Different Platforms: The useRs' Point of View, *useR!*, *The R User Conference*, Wirtschaftsuniversität Wien in Vienna, Austria, 15-17/06/2006.

- 67. <u>Iacus, S.M.</u>, Porro, G. (2006) Matching and ATT Estimation via Random Recursive Partitioning, *useR!*, *The R User Conference*, Wirtschaftsuniversität Wien in Vienna, Austria, 15-17/06/2006.
- 68. <u>Iacus, S.M.</u>, La Torre, D. (2003) Fractals and Statistics: An R Package Called ifs. in *Proceedings of the 3rd International Workshop on Distributed Statistical Computing (DSC 2003) March 2022, Vienna, Austria ISSN 1609-395X, Hornik, K., Leisch, F. & Zeileis, A. (eds.). http://www.ci.tuwien.ac.at/Conferences/DSC-2003/*
- 69. <u>Iacus, S.M.</u> (2001) R porting for the Macintosh, in *Proceedings of the 2nd International Workshop on Distributed Statistical Computing (DSC 2001) March 1517, Vienna, Austria ISSN 1609-395X, Hornik, K., Leisch, F. (eds.). http://www.ci.tuwien.ac.at/Conferences/DSC-2001/*
- 70. <u>Iacus, S.M.</u> (1998) Semiparametric estimation of a functional of the drift coefficient for a small diffusion process, *Proceedings of Prague stochastics '98*, 6th Prague Symposium on Asymptotics Statistics, Vol 1, 243-246, Prague.
- 71. <u>Iacus, S.M.</u> (1998) Metodi di Stima Non Parametrici per Processi Stocastici, *Atti della XX-XIX Riunione Scientifica della Società Italiana di Statistica*, Sorrento.
- 72. <u>Iacus, S.M.</u> (1995) Planar random motion with finite velocity governed by a fourth-order hyperbolic equation, *Acts of Ninth European Young Statisticians Meeting*, Bernoully Society, Erasmus University, Rotterdam, 44-49.
- 73. Iacus, S.M. (1993) AMIGACensus'93, AMIGA Users Group Savona. Vol. 2, N. 2, pp 50-57.

Software packages

- 74. $\underbrace{\text{Iacus, S.M.}}_{\text{R-Project.org}}$ et al. : The R Statistical Environment. Available at: http://www.
- 75. <u>Iacus, S.M. et al.</u>: Yuima: The project for simulation and inference of multi-DIMENSIONAL STOCHASTIC DIFFERENTIAL EQUATIONS. Available at: http://R-Forge. R-Project.org/projects/yuima/
- 76. <u>Iacus, S.M.</u>: SDE: SIMULATION AND INFERENCE FOR STOCHASTIC DIFFERENTIAL EQUATIONS. R package version 2.0.10. Available at: http://CRAN.R-project.org/package=sde
- 77. <u>Iacus, S.M.</u>, King, G., Porro, G.: CEM: SOFTWARE FOR COARSENED EXACT MATCHING. R package version 1.1.4. Available at: http://gking.harvard.edu/cem
- 78. <u>Iacus, S.M.</u>: RRP: RANDOM RECURSIVE PARTITIONING. R package version 2.91. Available at: http://cran.r-project.org/src/contrib/Archive/rrp/
- 79. <u>Iacus, S.M.</u>, Masarotto, G.: LABSTATR: LIBRERIA DEL LABORATORIO DI STATISTI-CA CON R. R package version 1.0.7. Available at: http://CRAN.R-project.org/ package=labstatR

- 80. <u>lacus, S.M.</u>: OPEFIMOR: OPTION PRICING AND ESTIMATION OF FINANCIAL MODELS IN R. R package version 1.0. Available at: http://CRAN.R-project.org/package=opefimor
- 81. Blackwell, M., <u>Iacus, S.M.</u>, King, G., Porro, G.: CEM: STATA MODULE TO PERFORM COARSENED EXACT MATCHING. Available at: http://ideas.repec.org/c/boc/bocode/s457127.html#download
- 82. Blackwell, M., <u>Iacus, S.M.</u>, King, G., Porro, G.: CEM FOR SPSS: COARSENED EXACT MATCHING FOR SPSS. Available at: http://projects.iq.harvard.edu/cem-spss/home

In preparation

<u>lacus</u>, S.M. Second Edition of: Simulation and Inference for Stochastic Differential Equations: with R examples, Springer Series in Statistics, Springer NY.

Translations into italian language

<u>Iacus, S.M.</u> (2002) "Elements of Statistics II: Inferential Statistics", S. & R. Bernstein, McGraw-Hill Libri Italia.

Iacus, S.M. (2002) "Beginning Statistics", Diamond & Jefferies, McGraw-Hill Libri Italia.

<u>Iacus, S.M.</u> (2000) "Probability & Statistics, Second Edition, M. Spiegel, 380pp, McGraw-Hill Libri Italia.

Grants, Projects and Awards

Awards

- 2008 Distinguished Visiting Fellow Award from the Institute for Quantitative Social Science at Harvard University, Boston, USA.
- 2000 Awarded for Valuable research report of "CNR fellowship for abroad specialization". CNR [National Research Council], Italy.

Funded Projects & Research Grants

- 2011 Statistical and Computational Methods of Model Selection for Stochastic Differential Equations (P.I.), Italian Ministry of Education and Research PRIN 2009 [166.000 Euros for 2 years]
- 2009 Sperimentazione Valutatore Indipendente, Regione Lombardia, Direzione Formazione e Lavoro. With Checchi, D. (P.I.), et al. [68.000 Euros per year, 2 years]

- 2007 (on going project)The Yuima Project. Founded by the Japan Science Technology (JST) Basic Research Programs PRESTO, Grants-in-Aid for Scientific Research No. 19340021, and the Global COE program "The research and training center for new development in mathematics" of Graduate School of Mathematical Sciences, University of Tokyo.
- 2007 Risultati scolastici, percezioni delle competenze e decisioni di investimento in capitale umano, Progetto finalizzato Invalsi Finvali 2005, in collaborazione con IReR e IRRE Lombardia. With Checchi, D. (P.I.) and Porro, G. [50.000 Euros, 2 years]
- 2007 Qualità della formazione scolastica e apprendimento: effetti di breve e di medio periodo, nell'ambito del Progetto di ricerca sul capitale umano, IReR Lombardia. With Checchi, D. (P.I.), Porro, G. [15.000 Euros, 1 year]
- 2006 Progetto "BladeR", Fondo Grandi Attrezzature, University of Milan, Iacus, S. M. (P.L.) [250.000 Euros, 1 year]
- 2005 Financing public debt in the Stability and Growth Path era through government bonds: normative analysis, macroeconomic scenarios, bond risk-yield analysis, simulation methods and models of optimal issuances. MIUR grant F.I.R.B. RBNE03E3KF_004. With A. Missale (PI), E. Bacchiocchi. [150.000 Euros, 3 years]

Other Grants and Fellowships

- 2007 Stochastic differential equations driven by finite velocity processes. Probabilistic and statistical aspects and their applications to finance, University of Milan.
- 2006 JSPS Fellowship for Foreign Researchers, 2 months, subject of research "Inference for stochastic processes, computational statistics and numerical methods".
- 2004 Stochastic differential inclusions, University of Milan.
- 2003 Human capital and professional paths of degree students of Milan University, COSP grant, University of Milan.
- 2003 Research project: native implementation of Aqua GUI to R for MacOSX and low level system integration, R Statistical Foundation grant (6 months).
- 2002 Microdata analysis of non-profit temporary work agencies, IRES grant, Lumbardy.
- 2001 Statistical analysis of stochastic resonance, University of Milan grant (12 months).
- 2001 Statistical model selection: frequentist criteria based on likelihood and predictive densities, MURST [Ministry of University and Scientific Research] (6 moths).
- 2000 Data-ming techniques, University of Milan grant for young researchers (12 mesi).
- 2000 Asymptotic optimality of goodness-of-fit tests for dynamic and structural models, University of Milan grant (12 moths).
- 2000 Optimization techniques for Economy, Finance and Industry, CNR [National Research Council] project for young researchers (3 months).

- 1999 Minimax goodness-of-fit tests for non-parametric hypotheses, University of Milan grant (12 moths).
- 1998 Statistical models: probabilistic bases and procedures for statistical decisions, MURST grant (24 months).
- 1998 Fellowship for abroad study, University of Padua, (6 months).
- 1998 Socrates fellowship, University of Padua, (6 months).
- 1997 CNR fellowship for abroad specialization, grant n 203.10.36 (12 months).
- 1996 Research Project A 38, Tipologie dei comuni italiani secondo indicatori agricoli e socio-economici, ISTAT [Natiional Statistic Institute] (3 months).

Teaching Activities

PhD level teaching

- Mathematical Statistics, PhD Program in Economics, University of Milan [10 hours, oct 2011]
- Applied Statistics for Human Resource Management with R, Vodafone Italy, Milan, [12 hours, july 2011]
- Statistical Inference for Diffusion Processes Observed at Discrete Time, PhD Program in Mathematical and Statistical Methods for Economics and Social Sciences, University of Perugia [9 hours, june 2008]
- Introductory stochastic calculus, PhD Program in Statistics, University of Milan [9 hours, january 2008]
- Course on the R statistical system, IReR Lombardia, Milano [20 hours, oct-nov 2007]
- R for Scientific Research, "Science Park", Trieste (http://www.area.ts.it)[32 hours, march 2006]
- Course on statistics and time-series analysis in R, Terna Rete Elettrica Nazionale (http://www.terna.it) Rome, [24 hours, may-june 2006]
- Statistics, Graduate School of Political Sciences, Milan University [40 hours; graduate; 03/04, 05/06]
- Introduction to R, Graduate School in Statistics, University of Milan [15 hours; graduate; a.y. 02-/03-03/04-06/07-07/08]
- Asymptotic efficiency of estimators, Graduate School in Statistics, University of Milan [20 hours; graduate; a.y. 01-/02-02/03]
- Asymptotic efficiency of goodness-of-fit tests, Graduate School in Statistics, University of Milan [20 hours; graduate; a.y. 00/01]

Undergraduate and Master level teaching

- Statistics for Finance, Catholic University in Milan [48 hours; master; a.y. 2010/2011]
- Elementary statistics, Faculty of Political Sciences, Milan University [40 hours; undegraduate; from a.y. 2001/2002 till a.y. 2010/2011]
- Probability, Graduate School of Social Sciences, Milan University [20 hours; master; from a.y. 2007/2008 till a.y. 2010/2011]
- Mathematical Finance, Milan University [40 hours; master level; from a.y. 2004/2005 to 2010/2011]
- Statistics, Business School on Economics and Finance, Bocconi University, Milan [56 hours; undergraduate; a.y. 01/02-02/03-03/04]
- Statistics in epidemiology, Milan University [20 hours; undergraduate, a.y. 02/03]
- Statistics, Milan University [72 hours; undegraduate; 00/01]
- Probability and Statistics, l'Istitut Supérieur des Materiaux du Mans (ISMANS), Le Mans (France) [14 hours; undegraduate; a.y. 1997/98]
- Functional and Complex Analysis, l'Istitut Supérieur des Materiaux du Mans (ISMANS). Le Mans (France) [16 hours; undegraduate classes; a.y. 1997/98]

Invited lectures

- Graduate School of Mathematics, Tokyo University, Japan, december 2010;
- Laboratoire de Statistique et Processus, Université du Maine, Le Mans, France, september 2010;
- Department of Mathematics, University of Copenhagen, Denmark, september 2010;
- Faculty of Mathematics, Kyoto University, Japan, november 2010;
- Graduate School of Mathematics, Tokyo University, Japan, december 2009;
- CIMPA School 2010 Applied Mathematics and Engineering, Balneario Solfs, Uruguay, March 2010;
- RMI of the National University of Singapore, February 2010;
- Institute of Finance, University of Lugano, Switzerland, November 2009;
- Department of Statistical Science, Catholic University, Milano, November 2009;
- Department of Statistics and Mathematics, Vienna University of Economics and Business Administration, Austria, march 2009;
- Department of Statistics, University of Florence, Florence, february, 2009;

- Graduate School of Mathematics, Tokyo University, Japan, december 2008 and february 2009;
- Department of Economics, Universita' dell'Insubria, Varese, october 2008;
- Institute for Quantitative Social Science, Harvard University, USA, october, 2008:
- Department of Financial Economics and Statistics, University of Perugia, june 2008;
- Department of Decision Sciences, Bocconi University, Milan, february 2008;
- Research Institute for Computational Methods, Vienna University of Economics and Business Administration, Austria, january 2008;
- Graduate School of Mathematics, Tokyo University, Japan, december 2007;
- Department of Mathematics, McGill University, Canada, october 2006;
- Graduate School of Mathematics, Kyushu University, Fukuoka, Japan, october 2006;
- Institute of Statistical Mathematics, Tokyo, Japan, september 2006;
- Graduate School of Mathematics, Tokyo University, Japan, december 2006;
- Department of Economics and Statistics, University of Trieste, march 2006;
- Graduate School of Mathematics, Tokyo University, Japan, december 2005;
- Department of Computer Oriented Statistics and Data Analysis, Augsburg, Germany, march 2004;
- Department of Economics, University of Pavia, march 2003;
- Institute for Quantitative Methods, Bocconi University, march 2002;
- Department of Statistics and Mathematics, University of Wien, Austria, march 2001;
- Department of Statistics, University of Copenhagen, Denmark, may 1998;
- Department of Mathematics, University of Paderborn, Germany, april 1998;
- Department of Statistical Sciences, University of Padua, october 1997;
- Department of Statistics and Mathematics, Université de Rennes, France, october 1997;
- Department of Statistics, Erasmus University, Rotterdam, Neetherlands, august 1995.

Hobbies

In the spare time I do like to design and maintain web sites like "Podstudy" at the University of Milan http://podcast.spolitiche.unimi.it or Astro-link <math>http://astrolink. mclink.it. I can face operative systems (like Unix derivates including Mac OS X) and non-operative system (MS-Windows etc) as well.

I am also an amateur astronomer; I like to do sailing, boat fishing and trekking and, last but not least, cooking and eating good food.