Antonietta Mira

Current Position: Full Professor, Statistics, Institute of Finance, USI, Lugano, since 2007
Vice-Dean, Faculty of Economics, USI, 2013-2015
Co-Director of the InterDisciplinary Institute of Data Science, USI, since March 2015

Education

- •Ph. Doctorate in Statistics, University of Minnesota, Minneapolis, MN, 1998
- •Master of Science in Statistics, University of Minnesota, Minneapolis, MN, 1996
- •Doctorate in Methodological Statistics, University of Trento, Italy, 1995
- •Degree in Economics, summa cum laude, University of Pavia, Italy, 1991

Honors

- •Fellow of the International Society for Bayesian Analysis (ISBA), since 2016
- •Visiting Fellowship of the Isaac Newton Institute for Mathematical Sciences (Cambridge, UK) to participate in the program Theoretical Foundations for Statistical Network Analysis, July - August 2016
- •Public debate at EXPO 2015, Milano, September 2015
- •Public lecture for the Festival of the Swiss Academy of Science 200 years anniversary, October 2015 to participate in the program Advanced Monte Carlo Methods for Complex Inference Problems, April - May 2014
- •Opening lecture of the academic year 2011-12, University of Lugano (USI).
- •Invited lecture at the "Istituto Lombardo Accademia di Scienze e Lettere", Milano, 2012.
- •Savage Thesis Award 1998 for an outstanding doctoral dissertation in Bayesian Econometrics/Statistics
- •Dissertation Fellowship, 97/98, University of Minnesota
- •Research Assistantship, U. of Minnesota, supported by National Science Foundation, 96/97

Teaching experience Teaching at the undergraduate level has been mostly held at the University of Insubria in Varese, Italy and at USI, Lugano, Switzerland. Master and Ph.D. level teaching has been held at USI, Lugano; Bocconi, Milano; Padova; Pavia, Perugia, Napoli and Cagliari.

Research Projects, Conference Lectures and Seminars (since 2007)

2016 **Invited lectures at international conferences**:

- I. Newton Institute for Mathematical Sciences, visiting professor, 2 weeks
- ISBA World Meeting, Sardegna, June. Organizer of 2 special topic sessions: *At the interface between posterior and molecular simulation* and *Methodological and computational advances for complex networks systems*
- COmputational Statistics and MOlecular Simulation, COSMOS, Paris, February
- Royal Statistical Society Local Group event on Bayesian computation, Readings, April
- CRiSM Workshop Estimating constants, Warwick, April

2016
- **SNSF (Swiss National Science Foundation), NRP (National Research Programme) 75, Big Data**, "A new Swiss National Social Well-Being Index through Big Data", submitted
  Co-Applicants: S. Iacus, Università degli Studi di Milano, Italy; F. Crestani, Faculty of Informatics and IDIDS, USI, Lugano
- **SNSF**, NRP Big Data, "Swiss Industrial Competitiveness: an Economic Complexity Approach", submitted
  Co-Applicants: G. Barone-Adesi, USI; L. Pietronero, Università di Roma Sapienza, Dipartimento di Fisica and Istituto dei Sistemi Complessi, CNR Roma; S. Peluso, Università Cattolica del Sacro Cuore, Dipartimento di Scienze Statistiche.
- **SNSF**, NRP Big Data, "Spatial statistical methods to optimize the location of Public Access Defibrillator and Emergency Medical System to improve survival of Out-of-Hospital Cardiac Arrest", submitted

Co-Applicants: Rolf Krause (Institute of Computational Science and Center for Computational Medicine in Cardiology, USI, Lugano), Auricchio Angelo (Fondazione Ticinocuore, Lugano, and Division of Cardiology, Fondazione Cardiocentro Ticino, Lugano), G. Arbia, U. Cattolica del Sacro Cuore, Roma and IDIDS, USI.

- **SNSF**, NRP Big Data, "Synchrotron Big Data", submitted,
  Co-Applicants: Steiner, Ullrich (PI), Adolphe Merkle Insitute, Sepe, Alessandro, Adolphe Merkle Institute, Schulthess, Thomas, Swiss National Supercomputing Centre (CSCS) / ETH Zurich
- **SNSF**, "Statistical solutions for regressions with big spatial data" Co-Applicants: G. Arbia, U. Cattolica del Sacro Cuore, Roma and IDIDS, USI.
- **SNSF**, "Data Science and Algorithmic Trading: a Signal Oriented Approach to Study the Endogenous Dynamics of Financial Markets"
  Co-Applicants: G. Barone-Adesi, IFIN, USI.

2015 **Invited lectures at international conferences**:

- Keynote speaker al 11th International Workshop for the Australasian chapter of the International Society for Bayesian Analysis (ISBA) and the annual meeting of the Bayesian Statistics section of the Statistical Society of Australia, Inc. (SSAI), Gold Coast, Australia, December
- Visiting professor, Queensland University of Technology, Brisbane, Australia, December (10 days)
- BIRS workshop, "Free-energy calculations. A mathematical perspective", Oaxaca, Mexico, July
- International conference, "3rd Meeting on Statistics", Athens, Greece, June

2015
- **SNSF**, PI, "Statistical Inference on Large-Scale Mechanistic Network Models" (3 years - 306.000 CHF)
- **SNSF conference financial support**, for the 6th Joint Meeting of Institute of Mathematical Statistics/International Society for Bayesian Analysis. For the same conference I've received financial support from *Google* and *Springer*, *CSCS* (Centro Svizzero di Calcolo Scientifico) and from *ISBA* (International Society for Bayesian Analysis, 13.300 USD).

2014 **Invited lectures at international conferences**:

- 8th International Conference on Computational and Financial Econometrics (CFE), "A general Bayesian MIDAS regression approach with application to data frequency selection", joint work with E. Ghysels and R. Solgi. Pisa, 6-8 December
- Meeting of the Italian Statistical Society, specialized session on "Computations with intractable likelihood", Cagliari, 11-13 June
- I. Newton Institute for Mathematical Sciences, visiting professor, 1 month.
- Workshop on "Computational methods for statistical mechanics – At the interface between mathematical statistics and molecular simulation" at the ICMS in Edinburgh, 2 - 6 June

2014
- **SNF Agorà project**, PI, " Numb3d by numb3rs? Lets play with Digits, Dice and Data: a 3D interactive tour " (2 years - - 198.000 CHF)
- **SNF research project**, co-PI with G. Barone-Adesi, "A Bayesian estimate of the pricing kernel" (3 years - 175.000 CHF)
- **SNF interdisciplinary project**, co-PI with A. Lomi, "Bayesian Modelling and Algorithms for Heterogenous Interorganisational Networks" (3 years - 308.000 CHF)

2013 **Invited lectures at international conferences**:

• Short course at the "Young statistician day" on "Applied Bayesian Modeling and computational methods" during the conference *Statistique Appliquée pour le Développement en Afrique*, Cotonou, Bénin, Africa, March 2013

•*ISBA Regional Meeting and International Workshop/Conference on Bayesian Theory and Applications (IWCBTA)*, Varanasi, India, January 6-10, 2013

2012 **Invited lectures at international conferences**:

•*Challenges and Advances in High Dimensional and High Complexity Monte Carlo Computation and Theory* at the Banff International Research Station for Mathematical Innovation and Discovery, March 18-23, 2012

•*Advances in Markov Chain Monte Carlo* at the International Centre for Mathematical Sciences (ICMS) in Edinburgh, 23-25 April 2012.

•*ISBA (International Society for Bayesian Analysis) World Meeting*, Kyoto, June 2012

•*5th International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM 2012)*, Oviedo, Spain, December 2012

2011 **Invited lectures at international conferences**:

•*Applied Stochastic Models and Data Analysis*, in the session on "Monte Carlo methods for Bayesian inverse problems", Roma, Italy, June

•*VIII National congress of italian Biometric Society*, Brescia, Italy, June

•*Joint international meeting of the IMS (Institute of Mathematical Statistics) and ISBA*, Satellite meeting on Adaptive MCMC, Utah, January.

• *Hierarchical Models and Markov Chain Monte Carlo*, Crete, June

2011 **SNF research project**, PI, "Zero-Variance Markov chain Monte Carlo" (2 years)

2010 **Invited lectures at international conferences**:

•*2010 World Meeting of the International Society for Bayesian Analysis*, invited discussant

•*Mathematical and Statistical Methods for Actuarial Sciences and Finance*, invited speaker in the session organized by Prof. G. Barone-Adesi

•*European Meeting of Statistician*, speaker in invited session organized by J. Moeller

2010 **SNF research project**, PI, "Adaptive Monte Carlo methods to estimate financial risk models " (2 years)

2009 **Invited lectures at international conferences**:

•*EPSRC Symposium Workshop on Markov Chain-Monte Carlo*, Warwick, UK

•*3rd International Conference on Computational and Financial Econometrics*, London, UK

2009 **Research projects**:

•Italian national research grant (2 years): *latent variable models for the analysis of panel data*, PI: Prof. G. Consonni, U. of Pavia

•Research Grant of Insubria University: *Bayesian model comparison and estimation*, PI: A. Mira

2008 **Invited lectures at international conferences**:

•*7th World Congress in Probability and Statistics*, sponsored by Bernoulli Society and IMS

• *9th ISBA World Meeting.*

2008 **Research projects**:

•Research Grant of Insubria University: *Monte Carlo simulation: new developments*, PI: Mira.

•Italian national research grant (COFIN, 2009 mentioned above).

•Since 2004 takes part to a research project supported by Lombardia Region as the statistical referee. Title of the project: "Induced medical prescription". Two research fellowships have been awarded on this grant and A. Mira has coordinated the research projects.

2007 **Invited lectures at international conferences**:

•*Third Workshop on Monte Carlo Methods*, Harvard, Massachussetts, USA.

2007 **Research projects**:

• Italian university research grant, *Adaptive Monte Carlo.*

• Visiting professor (1 week) at the University of Paris Douphine (FR).

•Italian national research grant (COFIN): *Variabili strumentali and valutazioni di politiche: una analisi basata sui modelli marginali con classi latenti*, PI: Prof. G. Consonni.

Editorial boards

- **Co-Editor** of the journal *Bayesian Analysis* (Journal Citation Reports IF = 2.417, 6th highest IF in the list of 117 Stats and Probability journals), since 2008
- **Guest Editor** for a special issue of the *International Journal of Approximate Reasoning*, 2016
- **Chief Guest Editor** for a special issue of the journal *Statistics and Computing*, 2015
- **Chief Guest Editor** for a special issue of the journal *Statistics and Computing*, 2014
- **Associate Editor** of the *Journal of Computational and Graphical Statistics*, 2006-08
- **Associate Editor** for *Statistica Sinica*, 2005-08

Conference organizations

- **Member of the scientific committee** of the international (6 days) workshop on *Challenges and Advances in High Dimensional and High Complexity Monte Carlo Computation and Theory*, Banff (Canada), International Research Station for Mathematical Innovation and Discovery, (March 2012). Workshop fully supported by BIRS (Banff Intern. Research Station)
- **Member of the scientific committee** of the (3 days) workshop on *Advances in Markov Chain Monte Carlo: Theory, Methodology and Applications*, Edimburgo (April 2012). Workshop fully founded by the International Centre for Mathematical Sciences
- **Member of the scientic program committee (co-chair) and of the organizing committee (chair)** of the second (2005), third (2008), fourth (2011), fifth (2014) and sixth (2016) joint international meeting IMS/ISBA, Institute of Mathematical Statistics/International Society for Bayesian Analysis Meeting.
- **Member of the scientic program committee and of the organizing committee** of the second Greco Italian Meeting on Statistics, Sardegna, Italy, 2010
- **Member of the scientic program committee** of the ninth world meeting of ISBA, Australia 2008.
- **Member of the scientic program committee** of the eight *"Valencia/ISBA World Meeting on Bayesian Statistics"*, Spain, 2006.

Conference sessions organizations

- **ISBA World Meeting, 2016**, session sponsored by BayesComp, *At the interface between posterior and molecular simulation*
- **ISBA World Meeting, 2016**, session sponsored by Junior-ISBA and SIS-Bayes (Società Italiana di Statistica), *Methodological and computational advances for complex networks systems*
- **Organizes a session** on "MCMC for Bayesian nonparametrics", V IMS-ISBA joint meeting, Chamonix (FR), 2014
- **Organizes a session** on "MCMC applications in finance" at the CFE 2010, (Computational and Financial Econometrics), London
- **Organizes a session** on "Efficient MCMC algorithms to estimate Bayesian financial econometric models " at the CFE 2011, London

- **Organizes an invited session for the Joint Statistical meeting of the American Statistical Association** held in Salt Lake City (USA), title of the session: *Adaptive Monte Carlo methods.*

Other Activities (since 2006)

- **Secretary of the ISBA Section on Bayesian Computation** : elected for the term 2013-14
- **Member of the ISBA council**: elected for the term 2011-13. ISBA website http://bayesian.org/
- **Scientific advisor** of the Ideatorio (USI) for the exhibit "Number numb" 2014-15
- **Member of the Savage Award Selection Committee"** (2003-05 and 2010-11) of the ISBA
- **Member of the scientic program committee** of the master *Methods for Management of Complex Systems*, of the IUSS (Institute for advance studies) of Pavia, since January 2003-07.
- **Member of the Lindley Price Committee** for the year 2007/08.
- **Member of the list of experts of CIVR** (Comitato di Indirizzo per la Valutazione della Ricerca), 2005-6 and 2011-12

Main research interests

Statistical theory of Markov chain Monte Carlo methods (MCMC) and other computational methods such as Importance sampling and Perfect simulation. Bayesian parametric and non-parametric methodology. Application of statistical models to problems mainly arising in social science, finance, economics and industry with a clear interdisciplinary attitude. Data Science.
Areas of particular interest are:

- Computational statistics
  - Markov chain Monte Carlo methods, Reversibly Jumps algorithm
  - Adaptive importance sampling, Adaptive Delayed Rejection
  - Population Monte Carlo and particle filters
  - Perfect simulation, Slice sampler
- Bayesian methodology
  - Mixture models, Latent variable models, hidden Markov models and graphical models
  - Non parametric approach
  - Model comparison via Bayes factor
- Data Science
  - Models for social networks
  - Computational algorithms for networks models
  - Computational algorithms for doubly intractable problems
  - Analysis of Call Detail Records (CDR)
- Financial models
  - Bayesian financial risk models and credit risk models
  - Models for financial high frequency data
  - Mixed Data Sampling (MIDAS) regression models

- Nonparametric Estimation of the State Price Density
- Filtered historical simulation
- Change point detection in time series

Publications

Peer-reviewed articles

(1) S. Petrone and A. Mira, Bayesian hierarchical nonparametric inference for change-point problems. *Bayesian Statistics 5*, 1996, pp. 693-703, J. M. Bernardo, J.O. Berger, A. P. Dawid, A. F. M. Smith (Eds.), Clarendon Press, Oxford

(2) R. Bellazzi, C. Larizza, A. Riva, A. Mira and S. Fiocchi, Distributed intelligent data analysis in diabetic patients management. *Journal of the American Medical Informatics Association*, 1996, pp. 194-198 Edited by J. J. Cimino , Hanley & Belfus, Inc. Medical Publishers, Philadelphia

(3) A. Mira, Distribution-free test for symmetry based on Bonferroni's measure. *Journal of Applied Statistics*, 1999, Vol. 26, No. 8, pp. 959-972, Carfax - UK

(4) L. Tierney and A. Mira, Some adaptive Monte Carlo methods for Bayesian inference. *Statistics in Medicine*, 1999, Vol. 18, pp. 2507-2515. Published by John Wiley & Sons, Ltd. Chichester, UK

(5) A. Mira and C. J. Geyer, On non-reversible Markov chains. *Fields Institute Communications*, 2000, Vol. 26: Monte Carlo Methods, pp. 95-110. Published by the American Mathematical Society, Providence, RI, N. Madras (Ed.) ISBN 10: 0-8218-1992-5

(6) A. Mira, J. Möller and G.O. Roberts, Perfect Slice Samplers. *Journal of the Royal Statistical Soc. Ser. B*, 2001, Vol. 63, No. 3, pp. 593-606, Oxford - UK (ISSN 13697412)

(7) P.J. Green and A. Mira, Delayed rejection in reversible jump Metropolis-Hastings, *Biometrika*, 2001, Vol. 88, No. 4, pp. 1035-1053, Oxford, UK (ISSN - 0006-3444)

(8) A. Mira, Efficiency of finite state space Monte Carlo Markov chains, *Statistics & Probability Letters*, Vol. 54, No. 4, pp. 405-411, 2001

(9) A. Mira, On Metropolis-Hastings algorithms with delayed rejection, *Metron*, 2001 (Dip. Stat., Prob. and Stat. App. Univ. Studi Roma "La Sapienza"), Vol. LIX, No. 3-4, pp. 231-241

(10) A. Mira and P.J. Green, Invited discussion of 'The art of data augmentation' by David A. van Dyk and Xiao-Li Meng. *J. of Computational and Graphical Statistics*, Vol 10, No. 1, pp. 94-98, 2001

(11) A. Mira, Ordering and improving the performance of Monte Carlo Markov chains, *Statistical Science*, Vol. 16, No. 4, pp. 340-350, 2001

(12) A. Mira and L. Tierney, Efficiency and Convergence Properties of Slice Samplers. *Scandinavian Journal of Statistics*, Vol. 29, No. 1, pp. 1-12, 2002

(13) A. Mira and D. Sargent, A new strategy for speeding Markov chain Monte Carlo algorithms *Statistical Methods & Applications*, Vol. 1:12, pp. 49-60, 2003

(14) A. Mira and G. Roberts, Invited discussion of 'Slice sampling' by R. Neal, *Annals of Statistics*, Vol. 31, No. 3, pp. 705-767, 2003

(15) A. Mira and P. Tenconi, Bayesian estimate of credit risk via MCMC with delayed rejection, *Stochastic Analysis, Random Fields and Applications IV*, pp. 277-291, in the series "Progress in Probability", Birkhäuser Verlag, Basel, 2004

(16) A. Mira and G. Nicholls, Bridge estimation of the probability density at a point, *Statistica Sinica*, Vol. 14, No. 2, pp. 603-612, 2004

(17) D. Bressanini, A. Morosi, S. Tarasco and A. Mira, Delayed Rejection Variational Monte Carlo, *Journal of Chemical Physics*, Vol. 121, No. 8, pp. 3446-3451, 2004

(18) F. Audrino, G. Barone-Adesi and A. Mira, The stability of factor models of interest rates, *Journal of Financial Econometrics*, Vol. 3, No. 3, pp. 422-44, 2005

(19) A. Mira, chapter title "MCMC methods to estimate Bayesian parametric models" in the book: *Bayesian Statistics: Modelling and Computation*, 2005, Vol. 25, pp. 419-439, edito da D.K. Dey and C.R. Rao, *Handbook of Statistics*, Elsevier B.V.

(20) F. Bartolucci, L. Scaccia and A. Mira, Efficient Bayes factor estimation from reversible jump output, *Biometrika*, Vol. 93, 1, pp. 41-52, 2006

(21) H. Haario, M. Laine, A. Mira and E. Saksman, DRAM: Efficient Adaptive MCMC. *Statistics and Computing*, Vol. 16, pp. 339-354, 2006

(22) A. Mira, Stationarity preserving and efficiency increasing probability mass transfers made possible. *Computational Statistics*, 2007, Vol. 21, No. 3-4 (double issue), pp. 509-522

(23) A. Mira and A. Baddeley, Deriving Bayesian and frequentist estimators from time-invariance estimating equations: a unifying approach (with discussion). In *Bayesian Statistics 8*, J. M. Bernardo, at al, eds., Oxford University Press, pp. 325-348, 2007

(24) F. Leisen and A. Mira, An extension of Peskun ordering to continuous time Markov chains, *Statistica Sinica*, Vol. 18, pp. 1641-1651, 2008

(25) A. Mira and F. Leisen, Covariance ordering for discrete and continuous time Markov chains, *Statistica Sinica*, Vol. 19, pp. 651-666, 2009

(26) Mantovani V., Lepore V., Mira A. and Berglin E., Non-inferiority randomized trials, an issue between science and ethics: the case of the SYNTAX study. *Scandinavian Cardiovascular Journal*, Vol. 44, No. 6, pp. 321-324, 2010

(27) A. Mira, Invited discussion of 'Improved Approximate Sum-Product Inference Using Multiplicative Error Bounds' by Y. Wexler and C. Meek in *Bayesian Statistics 9*, 2011, pp. 466-500, J. M. Bernardo, M. J. Bayarri, O. Berger, A. P. Dawid, D. Heckerman, A. F. M. Smith and M. West (Eds.), Oxford University Press, London, ISBN 9780199694587

(28) A. Mira and H. Haario, discussion of "Riemann manifold Langevin and Hamiltonian Monte Carlo methods" by M. Girolami and B. Calderhead, *J. of the Royal Statistical Society*, 2011, Vol. 73, No. 2, pp. 190-191

(29) M. Filippone, A. Mira and M. Girolami, Invited discussion of "Sampling Schemes for Generalized Linear Dirichlet Process Random Effects Models" by M. Kyung, J. Gill, and G. Casella, *Statistical methods and applications*, Vol. 20, No. 3, pp. 295-297, 2011

(30) JM. Cornuet, JM. Marin, A. Mira and C. Robert, Adaptive Multiple Importance Sampling, *Scandinavian Journal of Statistics*, Vol. 39, Issue 4, pp. 798-812, 2012

(31) F. Rigat and A. Mira, Parallel hierarchical sampling: a practical general-purpose multiple-chains algorithm. *Computational Statistics & Data Analysis*, Vol. 56, pp. 1450-1467, 2012

(32) A. Mira, R. Solgi and D. Imparato, Zero Variance Markov Chain Monte Carlo for Bayesian Estimators. *Statistics and Computing*, Vol 23:5, pp. 653-662, 2013

(33) R. Solgi and A. Mira, A Bayesian Semiparametric Multiplicative Error Model with an Application to Realized Volatility, *Journal of Computational and Graphical Statistics*, 22:3, pp. 558-583, 2013

(34) M. Girolami and A. Mira, invited discussion of "A Vine-copula Based Adaptive MCMC Sampler for Efficient Inference of Dynamical Systems" by D. Schmidl, C. Czado, S. Hug and F. J. Theis, *Bayesian Analysis*, Vol. 8, No. 1, pp. 27-32, 2013

(35) T. Papamarkou, A. Mira and M. Girolami, Zero Variance Differential Geometric MCMC Algorithms, *Bayesian Analysis*, Vol. 9, No. 1, pp. 97-128, 2014

(36) S. Peluso, F. Corsi and A. Mira, A Bayesian High-Frequency Estimator of the Multivariate Covariance of Noisy and Asynchronous Returns, *Journal of Financial Econometrics,* Vol. 13, No. 3, pp. 665-697, 2015

(37) A. Caimo and A. Mira, Efficient computational strategies for doubly intractable problems with applications to Bayesian social networks, *Statistics and Computing*, Vol. 25, pp. 113-125, 2015

(38) S. Peluso, A. Mira and P. Muliere, Reinforced Urn Processes for Credit Risk Models, *Journal of Econometrics*, Vol. 184, Issue 1, pp. 112, 2015

(39) A. Caimo and A. Mira, Delayed rejection algorithm to estimate Bayesian social networks, *Journal of Methodological and Applied Statistics*, 16(1), 33 44, 2014

(40) N. Friel, A. Mira and C. Oates, Exploiting Multi-Core Architectures for Reduced-Variance Estimation with Intractable Likelihoods, *Bayesian Analysis*, Vol. 11, N. 1, pp 215-245, 2016

Books and Book/Encyclopedia contributions

(41) F. Bartolucci, A. Mira and L. Scaccia, Answering two biological questions with a latent class model via MCMC applied to capture-recapture data, in *Applied Bayesian Statistical Studies in Biology and Medicine*, 2003, pp. 7 - 23. M. Di Bacco, G. D'Amore, F. Scalfari, editors. Kluwer Academic Publishers, Norwell, MA, USA; ISBN: 1-4020-7548-0

(42) G. Fonseca, A. Mira, F. Sacco, P. Tenconi, *Indagine Provinciale sull'applicazione del d.lgs 626/94*. Pubblicazione a cura della Camera di Commercio Industria and Artigianto di Varese and Quaderno di Ricerca numero 2005/12, Dipartimento di Economia, Università dell'Insubria

(43) A. Mira, Strategies to improve convergence and mixing in Markov chain Monte Carlo, in *Encyclopedia of Statistics in Quality and Reliability*, Wiley, 2007

(44) V. Bossi, A. Mira and F. Arlati, *Mate-Magica, I giochi di prestigio di Luca Pacioli*, (Math-Magic games of L. Pacioli), Aboca, 2012.

(45) T. Papamarkou, A. Mira and M. Girolami, "Hamiltonian Methods and Zero-Variance Principle", book chapter in volume *Current Trends in Bayesian Methodology with Applications*, jointly edited by Dipak K. Dey, Umesh Singh and A. Loganathan (Chapman & Hall/CRC Press), pp. 457-476, 2015

(46) S. Peluso and A. Mira, Convergence and Mixing in Markov Chain Monte Carlo: Advanced Algorithms and Latest Developments, in *Encyclopedia of Statistics in Quality and Reliability*, Wiley StatsRef, 112, 2015

(47) A. Mira and C. Robert, An introduction to the special issue Joint IMS-ISBA meeting - MCMSki 4, *Statistics and Computing*, Vol. 25, Issue 1, p 1, 2015

Proceedings

(48) A. Mira, BCP^2: an environment to run Markov Chains for Bayesian Change Point Problems. *Proceedings of the Second World Conference of the International Association for Statistical Computing* (IASC), 1996, Vol. 29, No. 2, pp. 402 - 408

(49) A. Mira, J. Möller and G. O. Roberts, Perfect Simple Slice Sampler. *Bulletin of the International Statistical Institute, 53rd Session Proceedings*, 2001, Tome LIX, Book 1, pp. 73-79

(50) L. Scaccia, A. Mira and F. Bartolucci, Bayesian latent class models with application to credit-scoring and capture-recapture data. *Proceedings of the ISI 2003 - International Statistical Institute*, 2003, Vol. LX, Book 2, pp. 377-378

(51) F. Bartolucci, A. Mira and L. Scaccia, An investigation on the delayed rejection strategy in the capture-recapture context, *Proceedings SCO 2003 - Modelli complessi e metodi computazionali intensivi per la stima e la previsione*, pp. 45-50

Technical reports

(52) S. Peluso, A. Mira and P. Muliere, Conditionally Gaussian Random Sequences for Robust Integrated Variance Estimation, submitted

(53) E. Ghysels, R. Solgi and A. Mira, A general Bayesian MIDAS regression approach with application to data frequency selection, to be presented at the "8th International Conference on Computational and Financial Econometrics", Pisa December 2014, invited session.

(54) F. Macaluso, A. Mira and P. Schneider, How to sample from a distribution when only the moments are know with application to financial affine models. Presented at the "Annual Swiss Doctoral Workshop in Finance", Gerzensee 2014 and at the "Computational Methods for Jump Processes", Warwick 2014 (poster session), to be presented at the "8th International Conference on Computational and Financial Econometrics", Pisa December 2014, invited session.

(55) S. Peluso, A. Mira and P. Muliere, Beta-Stacy Bandit Problems, submitted

(56) S. Peluso, A. Mira and P. Muliere, Bayesian Semiparametric State Space Models for Interest Rates, submitted

Bibliometrics (updated on 16.1.2016)

Sum of the times cited: 4615 - without self-citations: 4378
Citing articles: 3960 - without self-citation: 3857
Average Citations per Item: 19. Average Citations per Year: 136
H-Index: 35
Source: ISI

Citations: 757
H-Index: 11
Source: Scopus

Citations: 1781
H-Index: 17
i10-Index: 23
Source: Google Scholar