ANTONIETTA MIRA

Current Position
Professor of Statistics, Università della Svizzera italiana, USI, Lugano
Founder and Director of the Data Science Lab, Institute of Computational Science, USI
Professor of Statistics University of Insubria, Dep. of Science and high Technology (part-time 2015-20)

Education
Ph. Doctorate in Computational Statistics, University of Minnesota, Minneapolis, MN, 1998
Ph. 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, since 2016
- Fellow of Istituto Lombardo Accademia di Scienze e Lettere, since 2016
- Member of the Federal Statistics Committee, Switzerland (2020-23)
- Member of the Institute of Mathematical Statistics council (2017-2020)
- Member of the scientific advisory commette:
    - QUT Centre for Data Science - chair (since 2020)
    - Swiss Statistical Society
    - AlmaLaurea Scientific board (2020-2023)
- Member of the advisory board of:
    - AlmaLaurea (2016-2020)
    - Harvard Data Science Review, since 2019
    - Two EPSRC founded projects (Bayes4health and CoSInES), since 2019
    - EPSRC founded Centre for Doctoral Training in Distributed Algorithms, since 2019
- Adjunct Professor:
    - *Queensland University of Technology*, Brisbane, Australia
- Visiting Professor:
    - *Université Paris Douphine*, Centre de Recherche en Mathématique de la Décision, 2007
    - *University of Western Australia*, School of Mathematics and Statistics, 2003 e 2018
    - *University of Bristol*, School of Mathematics, 2000
- Visiting Fellowship, Isaac Newton Institute for Mathematical Sciences (Cambridge), 2014 and 2016
- Savage Thesis Award 1998 for an outstanding doctoral dissertation in Bayesian Econometrics/Statistics
- Dissertation Fellowship, 97/98, University of Minnesota

A. Mira has published over 100 scientific papers in renewed international journals, she is invited every year as plenary speaker to numerous international conferences, she is also devoted to science dissemination and popularization being often interviewed on TVs, radios and newspapers.

Main research interests
Methodological Data Science with specific interest in statistical models applied to problems arising in complex data from different application domains (life and social science, economics, medicine and biology) with a clear interdisciplinary attitude.
Computational Data Science to calibrate/estimate parameters of complex hierarchical modes in large data context, with specific interest in Monte Carlo and other computational methods such as Approximate Bayesian Computation, Importance sampling and Perfect simulation.
Bayesian parametric and non-parametric methodology to include expert prior opinions in the inferential process, with specific interest in modeling, estimation, testing, comparison.

Main Research Projects supported by International Founding Agencies (2018-20)
- co-PI, H2020 *Pan-European response to the impacts of Covid-19 and future pandemics and epidemics - PERISCOPE*
- co-PI, Regione Lombardia *Description and Prediction of the impact of COVID-19 in the emergency system in Lombardy*
- *Financial support for organizing a one week conference with 80 participants: End-to-end Bayesian learning methods - CIRM - 25-29 of October 2021*
- *UKRI Open call for research and innovation ideas to address COVID-19,* COVID-19: Optimal Lockdown, *Project partner*
- Bayesian Modelling and Algorithms for Heterogenous Interorganisational Networks, *co-PI with A. Lomi,*

SNSF, Swiss National Science Foundation

- Statistical Inference on Large-Scale Mechanistic Network Models, *PI, SNSF*
- Statistical solutions for regressions with big spatial data, *co-PI with G. Arbia, SNSF*
- A Bayesian estimate of the pricing kernel, *co-PI with G. Barone-Adesi, SNSF*
- Bayesian Parameter inference for stochastic models, *co-PI with C. Albert, Swiss Data Science Center*
- *Exhibit:* Numb3d by numb3rs? Let's play with Digits, Dice and Data: a 3D interactive tour, *PI, SNSF, and Embassy of Switzerland in Italy*

Main conference organizations

- **Member of the scientific program committee** *of the meeting of the Italian Statistical Society, 2018*

- **Member of the scientic program committee and of the organizing committee** *of the joint workshop Swiss National Supercomputing Center and the Data Science Center, on:*
    Data Science with [a] Spark, *September 2016*
    Accelerating Data Science with HPC, *September 2017*

- **Member of the scientific 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 of the Institute of Mathematical Statistics / International Society for Bayesian Analysis*

- **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 (2012). Workshop fully founded by the International Centre for Mathematical Sciences*

- **Member of the scientific program committee** *of the ninth world meeting of ISBA, Australia 2008*

- **Member of the scientific program committee** *of the eight* ISBA World Meeting, *Spain 2006*

Other Activities
- **Member of the IMS Task Force** *on the Ph.D. Curriculum in Stat. and Prob. since 2019*
- **Member of the ISBA Continuing Education Committee***: 2019 -2021*
- **Co-founder and Co-director** *of the Interdisciplinary Institute of Data Science, USI, 2015-2017*
- **Vice-Dean**, *Faculty of Economics, USI, Lugano, 2013-15*
- **Board member of the ISBA Section on Bayesian Computation***: elected for the term 2013-14 and re-elected for the term 2014-16. ISBA website http://bayesian.org/*
- **Member of the ISBA council***: 2011-13*
- **Co-Editor** *of* Bayesian Analysis *(2016 Journal Citation Reports IF = 2.417), 2008-16*
- **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*
- **Member of the Savage Award Committee**, *2003-05 and 2010-11*

Keynote speaker in science dissemination events
- *Conference show* Mathematical+Magic, *organized by PalermoScienza, Palermo, 2020*
- *Conference show* Fractals, *opening ceremony of the 106-th National Conference of the Italian Society of Otolaryngology, Rimini Auditorium, 2019*
- *Conference show on* The Art and Science of Fractals, *Art&Science, Petruzzelli theater, Bari, 2019*
- *CICAP FEST, The Magic of Leonardo da Vinci, and conference show with R. Cremona on* Mathematical+Magic, *Padova, September*

- *V Swiss-Italian Discussion Forum, rapporteur for the* Science and Technology Cluster on Health and Big Data, *2019*
- Data Driven Innovation, *Chamber of Commerce for Innovation, Rome, 2018*
- Artificial Intelligence and the service of citizens , *Italian Agency for Digitalization, Rome 2018*
- Science and us, *BrainCircle Italia, Eliseo Theater, Rome 2018*
- Meet the Media Guru, Exhibitionist, *Fondazione Fiera Milano 2017*
- Accademia dei Lincei, *5th IinteR-La+B, main discussant, Rome 2016*
- EXPO 2015, *Public debate on Data and Food Science, Milan 2015*
- Swiss Academy of Science 200 years anniversary, *Public lecture, Lugano 2015*
- Opening lecture of the academic year 2011-12, *Università della Svizzera italiana, Lugano 2012*

Freetime *Antonietta is a practitioner magician with specific interest in mathematical magic on which topic she wrote the book: V. Bossi, A. Mira and F. Arlati,* Mate-Magica, I giochi di prestigio di Luca Pacioli, *(Math-Magic games of Luca Pacioli), 2012.*
She performs magic in pediatric hospitals as a volunteer Doctor Clown and has created a conference-show on mathematical+magic that she performs in theaters and lecture halls.

CV updated to 10.10.20