CURRICULUM VITAE et STUDIORUM

Laura Maria Sangalli

Born on 12 January 1979 in Pavia, Italy. Italian citizen. Married, one child.
MOX - Dipartimento di Matematica, Politecnico di Milano, P.zza L. da Vinci 32, 20133 Milano, MI, Italy
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Positions

2015/03 - present Associate Professor, MOX Laboratory for Modeling and Scientific Computing, Dipartimento di Matematica, Politecnico di Milano, Italy.

National Full Professor Qualification in Statistics (Abilitazione Scientifica Nazionale 2016, idoneità I fascia, settore 13/D1 - Statistica).

2014/06 - 2015/03 Associate Professor tenure track in Statistics (Ricercatore Senior), MOX, Dipartimento di Matematica, Politecnico di Milano.

2010/06 - 2014/06 Assistant Professor in Statistics (Ricercatore Junior), MOX, Dipartimento di Matematica, Politecnico di Milano.

National Associate Professor Qualification in Statistics (Abilitazione Scientifica Nazionale 2012, idoneità II fascia, settore 13/D1 - Statistica).

2006/06 - 2010/06 Postdoc, MOX, Dipartimento di Matematica, Politecnico di Milano.

2006/03 - 2006/05 Postdoc, Department of Mathematics and Statistics, Lancaster University, UK.

Education

2002/11 - 2006/02 PhD in Mathematics and Statistics, Dipartimento di Matematica, Università degli Studi di Pavia, Italy. Thesis: "Random probability measures and their applications to Bayesian statistics". Supervisor: Prof. Eugenio Regazzini.

2005/03 - 2005/10 *MARIE-CURIE* Programme, 6th Framework Program European Union; Department of Mathematics and Statistics, Lancaster University. Research project: "Computer intensive methods in applied statistical modelling". Supervisor: Prof. Gareth O. Roberts.

1998/09 - 2002/07 Laurea cum laude (Master degree, first-class honours) in Economics, Università degli Studi di Pavia. Thesis: "Analisi bayesiana di modelli mistura". Supervisor: Prof. Guido Consonni.

Research Grants

2010/12 - 2014/07 *Starting grant FIRB Futuro in Ricerca*, funded by MIUR Ministero dell'Istruzione dell'Università e della Ricerca (264,9K euro, total with co-funding: 327K euro). Research project: "Advanced statistical and numerical methods for the analysis of high dimensional functional data in life sciences and engineering" (short title: SNAPLE Statistical and Numerical methods for the Analysis of Problems in Life sciences and Engineering)
http://mox.polimi.it/users/sangalli/firbSNAPLE.html
One in 105 *projects selected out of* 3792 *proposals* in all fields of sciences and humanities (*success rate 2.7%*).

Principal investigator: Laura M. Sangalli. Research team: Laura M. Sangalli (funded by SNAPLE 2013/06 - 2014/06), John A. D. Aston (CRiSM, University of Warwick, UK), Simona Perotto, Bree Ettinger (PostDoc funded by SNAPLE 2011/06 - 2013/06), Laura Azzimonti (PostDoc funded by SNAPLE 2013/01 - 2014/01).

2016/11 - 2020/11 Member of the proponent team of the ICT COST Action "Vector Boson Scattering Coordination and Action Network", EU Framework Programme Horizon 2020.

2015/03 - 2019/03 Member of the proponent team and currently acting as Management Committee Substitute of the ICT COST Action CRoNoS: Computationally intensive methods for the Robust analysis of Non-Standard data, EU Framework Programme Horizon 2020. Forecasted EU funding: about 680000 euro.

2010/06 - 2013/06 Research program Dote Ricercatore, Politecnico di Milano - Regione Lombardia. Research project: "Functional data analysis for life sciences". This research program funded 3 years of my assistant professorship.

2007 - present Various visiting research fellowships and grants (see VISITING).

2010, 2012 and 2013 Young researcher grants, Dipartimento di Matematica, Politecnico di Milano (awarded on the base of publication records).

2005 and 2004 Research prizes for PhD students of the Istituto Universitario di Studi Superiori di Pavia.

2005/03 - 2005/08 *MARIE-CURIE* visiting PhD scholarship, Lancaster University.

2002/11 - 2005/10 Italian PhD scholarship.

EDITORIAL AND REFEREEING ACTIVITY

2016 - present *Co-Editor in Chief* (with Yimin Xiao) of Statistics and Probability Letters.

2015 - present Associate Editor of the International Journal of Biostatistics.

2015 - present Associate Editor of Stat.

2016 - 2017 Guest Editor of the Special Section of Statistics and Econometrics on "Functional data analysis", Vol. 1, pp. 99–200.

2014 Guest Editor of the Special Section of the Electronic Journal of Statistics on "Statistics of Time Warpings and Phase Variations", Vol. 8, No. 2, pp. 1697–1906.

2009 - present Referee for: Annals of Statistics; Journal of the American Statistical Association; Journal of the Royal Statistical Society Series B; Journal of the Royal Statistical Society Series C; Biometrika; Journal of Multivariate Analysis; Scandinavian Journal of Statistics; Environmetrics; Journal of Computational and Graphical Statistics; Computational Statistics and Data Analysis; Stochastic Environmental Research and Risk Assessment; Bayesian Analysis; Psychometrika; Atmospheric Measurement Techniques; Springer Series Contribution to Statistics.

2013 - present Referee of PhD thesis.

2009 Co-Editor of the conference proceedings of S.Co.2009.

VISITING (*long visits funded by host institutions*)

2011/01 - 2011/02 SAMSI Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, North Carolina, USA. Funded by SAMSI. One month. Invited by Steve Marron.

2010/04 - 2010/07 Department of Mathematics and Statistics, McGill University, Montreal, and School of Mathematics and Statistics, Carleton University, Ottawa, Canada. Funded by McGill University. Four months. Invited by James Ramsay.

2009/01 CRiSM Center for Research in Statistical Methodology, Department of Statistics, University of Warwick, UK. Funded by the CRiSM. Three weeks. Invited by Gareth Roberts.

2007/09 CRiSM. Funded by the CRiSM. Three weeks. Invited by Gareth Roberts.

2005/03 - 2005/12 Department of Mathematics and Statistics, Lancaster University. Ten months.

Research Evaluation

2012 Panelist for FIRB Futuro in Ricerca 2012 starting grants, MIUR Ministero dell'Istruzione dell'Università e della Ricerca; Panel: Physical Sciences and Engineering (PE1 Mathematics, PE6 Computer science and informatics, PE7 Systems and communication engineering).

Conference Organization and other Scientific Activities (selected)

2016-2020 Elected member of the European Regional Committee of the Bernoulli Society.

2017 - 2018 Member of the Scientific Program Committee of the 23rd International Conference in Computational Statistics, COMPSTAT 2018, Iasi, Romania.

2016 - 2017 Member of the Scientific Program Committee of the European Meeting of Statisticians 2017, 31st edition, Helsinki, Finland. The committee is composed by only 6 international researchers.

2016 - 2017 Organizer (with Jiguo Cao, Giles Hooker, James Ramsay and Fang Yao) of the workshop "Distributed Data for Dynamics and Manifolds"; hosted and funded by Banth International Research Station, Canada and Casa Matemática Oaxaca, Mexico.

2016 - 2017 Member of the Scientific Committee of the conference of The International Environmetrics Society, TIES 2017, Bergamo, Italy.

2016 - 2017 Member of the Scientific Program Committee of the Meeting of the Italian Statistical Society 2017, Florence, Italy.

2016 Member of the Scientific Committee of "CMStatistics2016, 9th International Conference of the ERCIM working group on Computational and Methodological Statistics"; Seville, Spain.

2015 - present Management Committee Substitute of the ICT COST Action "CRoNoS: Computationally-intensive methods for the robust analysis of non-standard data", EU Framework Programme Horizon 2020; Coordinator: Prof. E. Kontoghiorghes.

2014 Member of the Scientific Committee of "ERCIM2014, 7th International Conference of the ERCIM working group on Computing and Statistics"; Pisa, Italy. 1300 participants.

2014 Organizer of "FIRB SNAPLE closing workshop"; Politecnico di Milano.

2012 Organizer (with Steve Marron, James Ramsay and Anuj Srivastava) of the workshop "Statistics of Time Warpings and Phase Variations"; MBI Mathematical Biosciences Institute, The Ohio State University, OH, USA. Workshop funded by MBI.

2013 - present Chair of the Specialized Research Team "CODA - Complex data structures and Object Data Analysis", ERCIM Working Group on Computational and Methodological Statistics, the European Research Consortium for Informatics and Mathematics.

2013 - 2014 Member of the Organizing Committee of "IWFOS2014, 3nd International Workshop on Functional and Operatorial Statistics"; Università del Piemonte Orientale, Novara, Italy.

2013 Member of the Organizing Committee of "S.Co.2013, Complex Data Modeling and Computationally Intensive Statistical Methods for Estimation and Prediction"; Politecnico di Milano.

2013 Member of the Scientific and Organizing Committee of the Competition and BarCamp on "Technology foresight and statistics for the future"; Politecnico di Milano.

2012 - present Organizer of Mini-Symposia and Invited Sessions in various national and international conferences; see Meetings below.

2011 Organizer of "SNAPLE kickoff meeting"; First one-day workshop FIRB Futuro in Ricerca research project SNAPLE, Politecnico di Milano.

2009 Member of the Organizing Committee of "S.Co.2009, Complex Data Modeling and Computationally Intensive Statistical Methods for Estimation and Prediction"; Politecnico di Milano.

Invited Seminars in Universities and Research Centers (*funded by host institutions*)

2017/10 Department of Mathematics, Otto-von-Guericke University, Magdeburg, Germany.

2017/04 Dipartimento di Scienze Statistiche, Università degli Studi di Bologna, Bologna, Italy.

2016/11 Université Libre de Bruxelles, Bruxelles, Belgium.

2016/10 Bonn University, Bonn, Germany.

2016/07 Departamento de Estadística, Universidad Carlos III de Madrid, Madrid, Spain.

2016/04 Aalto University, Aalto, Finland.

2014/02 Dipartimento di Scienze Statistiche, Università Cattolica del Sacro Cuore, Milano, Italy.

2013/11 Dipartimento di Scienze Statistiche, Sapienza Università di Roma, Italy.

2013/10 Department of Mathematics and Statistics, University of Limerick, Ireland.

2013/10 Department of Decision Sciences, Università Bocconi, Milano.

2013/09 School of Maths & Stats, Newcastle University, UK.

2013/04 School of Mathematics and Statistics, University of Glasgow, UK.

2013/02 Università Cattolica del Sacro Cuore, Roma, Italy.

2012/05 EPFL École Polytechnique Fédérale de Lausanne, Switzerland.

2012/05 Seminari di Cultura Matematica; Politecnico di Milano.

2011/01 SAMSI Statistical and Applied Mathematical Sciences Institute, North Carolina, USA.

2010/03 Institut for Matematiske Fag, Aalborg Universitet, Denmark.

2010/03 Dipartimento di Economia Politica e Metodi Quantitativi, Università degli Studi di Pavia.

2010/01 Dipartimento di Scienze Statistiche, Università degli Studi di Padova, Italy.

2009/01 Department of Statistics, University of Warwick, UK.

2008/04 Dipartimento di Economia Finanza e Statistica, Università degli Studi di Perugia, Italy.

2007/09 Department of Statistics, University of Warwick, UK.

2006/03 European Commission, Directorate General Joint Research Center, Ispra, Italy.

2006/02 Dipartimento di Matematica, Politecnico di Milano.

2005/03 Department of Mathematic and Statistics, Lancaster University, UK.

Invited Seminars (*) and Organizing (♯) at Meetings

I received more than 90 invitations to give seminars at internationals meetings. The following are those I was able to accept. In several cases, my travel and subsidence have been funded by the organizers.

* **2017/07** International Workshop on Statistical Modelling IWSM 2017, Groningen, Netherlands. *KEYNOTE talk*; funded by IWSM.

* **2017/06** The International Workshop on Functional and Operatorial Statistics IWFOS 2017, A Coruña, Spain. *KEYNOTE talk*; funded by IWFOS

* **2017/03** ENAR 2017 Spring Meeting, Washington, USA. *Invited talk.*

* ♯ **2016/12** CMStatistics16, 9th International Conference of the ERCIM working group on Computing and Statistics; Seville, Spain. *Invited talk. Organizer of the Invited Session* "Inference for functional data, with life sciences applications".

* **2017/11** "Big Data", ICT4INTEL, Dipartimento delle informazioni per la sicurezza (DIS), Presidenza del Consiglio dei Ministri della Repubblica Italiana. *Invited presentation.*

* **2016/09** SIMAI2016, congress of the Italian Society of Industrial and Applied Mathematics, Milano. *Invited talk.*

* **2016/05** CASI2016, 36th Conference on Applied Statistics in Ireland, Limerick, Ireland. *KEYNOTE talk*; funded by CASI.

* **2016/05** Workshop on functional data analysis: recent progress and new perspectives; Les Diablerets, Switzerland. *Invited talk*; funded by École Polytechnique Fédérale de Lausanne.

* **2016/04** SIAM Conference on Uncertainty Quantification; Lausanne, Switzerland. *Invited talk.*

* ♯ **2015/12** CMStatistics15, 8th International Conference of the ERCIM working group on Computing and Statistics; London, UK. *Invited talk. Organizer of the Invited Session* "Functional and object data with complex dependencies".

* **2015/09** Eighth International Workshop on Simulation; Wien, Austria. *Invited talk.*

* **2015/07** ISNPS International Society of NonParametric Statistics, Congress on Biosciences, Medicine and Novel Nonparametric Methods; Graz, Austria. *Invited talk.*

* **2015/06** Workshop on Frontiers in Functional Data Analysis; BIRS Banff International Research Station for Mathematical Innovation and Discovery, Canada. *Invited talk*; funded by BIRS.

* **2015/06** GRASPA15, biannual meeting of the Research Group for Statistical Application to Environmental Problems; Bari, Italy. *Invited talk.*

* ♯ **2014/12** ERCIM'14, 7th International Conference of the ERCIM working group on Computing and Statistics; Pisa, Italy. *Invited talk. Organizer of the Invited Session* "Data on manifolds and manifold data". *Member of the Scientific Committee.*

* **2014/06** SIS Scientific Meeting 2014, Società Italiana di Statistica; Cagliari, Italy. *Invited talks.*

* **2014/03** Workshop on Spatial Statistics for Environmental and Energy Challenges; KAUST, Saudi Arabia. *Invited talk*; Funded by KAUST.

* ♯ **2013/12** ERCIM'13, 6th International Conference of the ERCIM working group on Computing and Statistics; London, UK. *Invited talk. Organizer of the Invited Session* "Spatial Functional Data Analysis".

* **2013/09** RSS Royal Statistical Society International Conference; University of Newcastle, UK. *Invited talk*; *Selected paper for the Journal of the Royal Statistical Society invited session (for Ser. B Statistical Methodology).* Funded by School of Maths & Stats, Newcastle University, UK.

♯ **2013/09** S.Co.2013, Eighth Conference on Complex Data Modeling and Computationally Intensive Statistical Methods for Estimation and Prediction; Politecnico di Milano. *Organizing Committee.*

* **2013/06** SIS2013, Società Italiana di Statistica; Università degli Studi di Brescia. *Invited talk.*

* **2012/12** Barcelona BioMed Conference in Bayesian Methods in Biostatistics and Bioinformatics, Barcelona, Spain. *Invited talk*; funded by Institute for Research in Biomedicine IRB Barcelona.

* **2012/12** ERCIM'12, 5th International Conference of the ERCIM working group on Computing and Statistics; Oviedo, Spain. *Invited talk.*

♯ **2012/11** Workshop on Statistics of Time Warpings and Phase Variations; MBI Mathematical Biosciences Institute, The Ohio State University, OH, USA. *Organizer*; funded by MBI.

* **2012/09** Workshop on High dimensional and dependent functional data; Bristol, UK. *Invited talk*; funded by the University of Bristol.

* **2012/08** ISCB 33rd Annual Conference of the International Society for Clinical Biostatistics; Bergen, Norway. *Invited talk*; funded by the International Society for Clinical Biostatistics.

* **2012/07** Joint Meeting of yBIS International Young Business and Industrial Statisticians and jSPE Young Portuguese Statisticians, Lisbon, Portugal. *Invited talk.*

♯ **2012/06** SIMAI2012, Società Italiana di Matematica Applicata ed Industriale; Politecnico di Torino, Italy. *Co-organizer of the minisymposium* "Computational and statistical methods for biomedical applications".

♯ **2012/06** SIS2012, Società Italiana di Statistica; Sapienza Università di Roma, Italy. *Organizer of the Specialized Session* "Statistics for high-dimensional and functional data".

♯ **2012/04** SIAM Conference on Uncertainty Quantification; Raleigh, North Carolina. *Co-organizer of the minisymposium* "Data analysis and inference in functional spaces; statistical and numerical approaches to uncertainty estimation".

* **2012/01** TIES2012, 22nd Annual Conference of The International Environmetrics Society; Advanced Institute of Mathematics, University of Hyderabad, India. *Invited talk.*

* **2011/12** ERCIM'11, 4th International Conference of the ERCIM working group on Computing and Statistics; University of London, UK. *Invited talk.*

* **2011/10** Incontro dei giovani statistici, Giornata Italiana della Statistica; Sapienza Università di Roma. *Invited brief communication.*

♯ **2011/10** SNAPLE kickoff meeting, Fist one-day workshop on FIRB Futuro in Ricerca research project SNAPLE; Politecnico di Milano. *Organizer.*

* **2011/03** SIAM Conference on Computational Science and Engineering; Reno, Nevada. *Invited talk.*

* **2010/08** JSM2010 Joint Statistical Meetings; Vancouver, Canada. *Invited talk.*

* **2010/05** Workshop on Functional Data Analysis: Future Directions; BIRS Banff International Research Station for Mathematical Innovation and Discovery, Canada. *Invited talk*; funded by BIRS.

♯ **2009/09** S.Co.2009, Sixth Conference on Complex Data Modeling and Computationally Intensive Statistical Methods for Estimation and Prediction; Politecnico di Milano. *Organizing Committee.*

* **2009/09** SFC2009, XVIth Joint Meeting of the French Society of Classification; Grenoble, France. *Invited talk.*

* **2008/09** SIMAI2008, Società Italiana di Matematica Applicata ed Industriale; Roma, Italy. *Invited talk.* Young researcher travel support.

2008/01 MCMSki: Markov chain Monte Carlo in Theory and Practice; IMS and ISBA international meeting, Bormio, Italy. *Prize awarded for poster presentation.* Young researcher travel support.

2004/06 - present Co-author of invited talks and presenter of contributed talks at several international conferences (not listed in detail).

Supervision and Co-supervision of Post-Doc, PhD and Master

2 Post-Doctoral fellows

- Laura Azzimonti, 2013/01 - 2014/01, *funded by my starting grant project FIRB SNAPLE*; currently researcher at IDSIA Institute of artificial intelligence, Switzerland.
- Bree Ettinger, 2011/06 - 2013/06, *funded by my starting grant project FIRB SNAPLE*; currently lecturer and co-director of undergraduate studies at Emory University, Atlanta, USA.

7 PhD students

- Eleonora Arnone, 2014/10 - present.
- Federico Ferraccioli, 2017/11 - present, visiting PhD student from Università degli Studi di Padova, Italy.
- Antonio Elias Fernandez, 2017/04 - 2017/07, visiting PhD student from Universitad Carlos III de Madrid.
- Mara Bernardi, 2013/10 - 2016/10; currently postdoc at SISSA International School for Advanced Studies, Trieste, Italy.
- Marzia Cremona, 2012/10 - 2015/10; currently postdoc at Pennsylvania State University, USA.
- Gabriel Martos Venturini, 2013/09 - 2013/12, visiting PhD student from Universitad Carlos III de Madrid; currently post-doc at Universidad Católica de Chile.
- Laura Azzimonti, 2010/01 - 2013/01; currently researcher at IDSIA Institute of artificial intelligence, Switzerland.

20 Master students

Among these:
- Marco Stefanucci, 2015, visiting student from University of Rome, currently PhD student at University of Rome;
- Eardi Lila, 2014, currently PhD student at University of Cambridge;
- Matthieu Wilhelm, 2014, visiting student from École Polytechnique Fédérale de Lausanne, currently PhD student at Université de Neuchâtel, Switzerland;
- Mara Bernardi, 2013, currently postdoc at SISSA International School for Advanced Studies, Trieste, Italy;
- Davide Pigoli, 2009, currently lecturer at King's College London, UK;
- Valeria Vitelli, 2008, currently researcher at University of Oslo, Norway.

Teaching

Lecturer (since 2005), Teaching Assistant (since 2003) and Tutor (since 2001) for several courses in Statistics at undergraduate, graduate, post-graduate and post-doctoral level (*: course held in English). Currently lecturing about 400 students per year.

2017/2018

- Lecturer of "Statistica", undergraduate course, Politecnico di Milano.

2016/2017

- Coordinator and lecturer of "Geostatistica", PhD course, Politecnico di Milano.

- Lecturer of "Introduction to functional data analysis", course for researchers and PhD students, Consiglio Nazionale delle Ricerche, Milano.

- Lecturer of "Statistica", undergraduate course, Politecnico di Milano (2 classes).

2015/2016

- Lecturer of "Statistica", undergraduate course, Politecnico di Milano (2 classes).

2014/2015

- Lecturer of "Applied Statistics", graduate course, Politecnico di Milano.

- Lecturer of "Introduction to Statistics and Data Analysis", short course for the Master in Energy Finance, School of Management, Politecnico di Milano.

2013/2014

- Lecturer of "Statistica", undergraduate course, Politecnico di Milano (2 classes).

- Lecturer of "Big Data Challenges to Modern Statistics", 14th Annual Winter School in eScience (for PhD students, post-docs and young researchers), Geilo, Norway.

- Lecturer of "Introduction to Statistics and Data Analysis", short course for the Master in Energy Finance, School of Management, Politecnico di Milano.

- Coordinator and lecturer of "Inference for functional data with applications", PhD course, Politecnico di Milano.

2012/2013

- Lecturer of "Statistica", undergraduate course, Politecnico di Milano.

- Lecturer of "Introduction to Statistics and Data Analysis", short course for the Master in Energy Finance, School of Management, Politecnico di Milano.

2011/2012

- Lecturer of "Statistica", undergraduate course, Politecnico di Milano.

- Lecturer of "Introduction to Statistics and Data Analysis", short course for the Master in Energy Finance, School of Management, Politecnico di Milano.

2010/2011

- Lecturer of "Statistica", undergraduate course, Politecnico di Milano.

- Teaching assistant of "Statistica", undergraduate course, Politecnico di Milano.

- Lecturer of "Introduction to Statistics and Data Analysis", short course for the Master in Energy Finance, School of Management, Politecnico di Milano.

2009/2010

- Lecturer of "Introduction to Statistics and Data Analysis", short course for the Master in Energy Finance, School of Management, Politecnico di Milano.

- Teaching assistant and tutor of "Statistica Applicata", graduate course, Politecnico di Milano.

- Teaching assistant of "Sequenze temporali ad alta frequenza: Analisi di dati funzionali - Data Stream Mining", short course for PhD students, post-docs and young researchers, organized by SIS Società Italiana di Statistica; Seconda Università di Napoli, Italy.

2008/2009

- Teaching assistant of "Statistics", graduate course, Politecnico di Milano.

- Teaching assistant of "Statistica", undergraduate course, Politecnico di Milano.

2007/2008

- Teaching assistant of "Statistics", graduate course, Politecnico di Milano.

- Teaching assistant of "Statistica", undergraduate course, Politecnico di Milano.

- Teaching assistant of "Statistica matematica A", undergraduate course, Politecnico di Milano.

- Tutor of "Statistica Applicata", graduate course, Politecnico di Milano.

2006/2007

- Teaching assistant of "Statistica", undergraduate course, Politecnico di Milano.

- Teaching assistant of "Statistica matematica A", undergraduate course, Politecnico di Milano.

2005/2006

- Lecturer of "Advanced Likelihood Theory", *MSc Master in Statistical Science*, Department of Mathematics and Statistics, Lancaster University, UK.

2004/2005

- Teaching assistant of "Probability and Statistics", post-graduate school "Quantitative Methods for Social and Economic Analysis", Università degli Studi di Pavia, Istituto Universitario di Studi Superiori di Pavia and Accademia Nazionale dei Lincei.

2003/2004

- Teaching assistant of "Modelli Statistici e Laboratorio Informatico di Statistica", undergraduate course, Università degli Studi di Pavia.

2001/2002

- Tutor of "Analisi dei Dati", undergraduate course, Università degli Studi di Pavia.
- Tutor of "Statistica 1", undergraduate course, Università degli Studi di Pavia.

2001/2002

- Tutor of "Analisi dei Dati", undergraduate course, Università degli Studi di Pavia.
- Tutor of "Statistica 1", undergraduate course, Università degli Studi di Pavia.

Activities for Promoting Mathematics and Research in High-Schools

2017/04 Open Day, Politecnico di Milano.

2016/06 Summer School, Politecnico di Milano.

2016/03 Lecture at the high school Liceo Scientifico Gandini, Lodi, Italia.

2015/06 Summer School, Politecnico di Milano.

2013/06 Summer School, Politecnico di Milano.

2012/10 European Job Day, Regione Lombardia, Milano.

2012/06 Summer School, Politecnico di Milano.

Other skills

Language skills English, fluent (spoken and written); French, fluent (spoken and written); Italian, mother tongue.

Computing skills Experienced programmer in S-Plus/R, Matlab. Good knowledge of the statistical package SAS.

Research projects

2010 - 2014 Starting grant project FIRB Futuro in Ricerca project SNAPLE (see Research grants). *Principal Investigator.*

2010 - 2013 Dote Ricercatore, Politecnico di Milano - Regione Lombardia, research project "Functional data analysis for life sciences" (see Research grants).

2013 - 2014 Research Project "Algoritmi numerici e di ottimizzazione per il supporto alle missioni di ricerca e soccorso", funded by AgustaWestland within the research program "RTO Rapid Tasking Operations" (MIUR - Regione Lombardia). Investigator.

2006 - 2009 *AneuRisk* Project, supported by Fondazione Politecnico di Milano and Siemens Medical Solutions Italia; P.I.: Prof. A. Veneziani. Investigator.

2006 - 2008 PRIN project "Numerical Approximation of multiscale and multiphysics problems with adaptive methods", funded by MIUR Ministero dell'Istruzione dell'Università e della Ricerca, scientific coordinators: Prof. Fausto Saleri, Marco Verani. Investigator.

2005 Marie Curie Training Site Human Potential Programme "Computer Intensive Methods in Applied Statistical Modelling", funded by 6th Framework Program European Commission. Investigator.

2003 - 2005 PRIN project "Bayesian networks and causal inference: methods and applications", funded by MIUR Ministero dell'Istruzione dell'Università e della Ricerca, scientific coordinator: Prof. G. Consonni. Investigator.

2002 - 2004 PRIN project "Bayesian nonparametric methods and their applications", funded by MIUR Ministero dell'Istruzione dell'Università e della Ricerca, scientific coordinator: Prof. E. Regazzini. Investigator.

Main international collaborations

James Ramsay, McGill University, Montreal, Canada: 4 papers co-authored.

Steve Marron, Univ. of North Carolina, NC, USA: 2 papers co-authored.

Anuj Srivastava, Florida State Univ., USA: 2 papers co-authored.

Fabio Nobile, École Polytechnique Fédérale de Lausanne: 2 papers co-autored.

Ongoing scientific collaborations

Main national collaborations
- IIT Istituto Italiano di Tecnologia
- IEO Istituto Europeo di Oncologia
- Dipartimento di Scienze Chirurgiche Specialistiche, Universit'a di Milano;
- Chirurgia Vascolare, Fondazione I.R.C.C.S. Ca' Granda Ospedale Maggiore Policlinico, Milano;
- Dipartimento di Scienze Neurologiche, Fondazione I.R.C.C.S. Ca' Granda Ospedale Maggiore Policlinico, Milano;
- Dipartimento di Neuroradiologia, Ospedale Niguarda Ca' Granda, Milano;
- Department of Neurophysiology, Fondazione IRCCS Istituto Neurologico "C. Besta" Milano;
- Cardiovascular Clinical Biology, Università Vita-Salute San Raffaele; Coronary Care Unit, Fondazione San Raffaele; Cytometry Service, Ospedale San Raffaele, Milano;
- Experimental Immunology Unit, Dip. di Biotecnologie DIBIT, Fondazione San Raffaele, Milano.
- Dipartimento di Patologia, Unità di Urologia and Unità di Day-Surgery, Fondazione IRCCS Istituto Nazionale per lo Studio e la Cura dei Tumori, Milano.
- Dipartimento di Bioingegneria, Istituto di Ricerche Farmacologiche Mario Negri, Bergamo;

Main international collaborations
- Department of Mathematics and Statistics, McGill University, Montreal, Canada;
- Department of Mathematics and Computer Sciences, Emory University, Atlanta, USA;
- Department of Statistics, University of North Carolina at Chapel Hill, USA;
- Department of Statistics, Florida State University, USA;
- Department of Biostatistics, Columbia Mailman School of Public Health, USA;
- CRiSM Center for Research in Statistical Methodology, Dept. of Statistics, University of Warwick, UK;
- Department of Mathematical Sciences, University of Copenhagen, Denmark.

Career Breaks

2014 - 2016 Maternity and parental leaves (more than 8 months).

Publications

Publications in international journals

[1] Mara S. Bernardi, Laura M. Sangalli, Gabriele Mazza, James O. Ramsay (2017), "A penalized regression model for spatial functional data with application to the analysis of the production of waste in Venice province", *Stochastic Environmental Research and Risk Assessment*, 31 (1), 23–38.

[2] Anna Maria Paganoni and Laura M. Sangalli (2017), "Functional regression models: some directions of future research", *Statistical Modelling*, 17(1), 1–6.

[3] Alice C.L. Parodi, Laura M. Sangalli, Simone Vantini, Bruno Amati, Piercesare Secchi and Marco J. Morelli (2017), "FunChIP: a R/Bioconductor package for functional classification of ChIP-seq data", *Bioinformatics*, 33 (16), 2570–2572.

[4] Piotr Kokoszka, Hanny Oja, Byeong Park, Laura M. Sangalli (2017), "Special issue on functional data analysis", *Econometrics and Statistics*, 1, 99–100.

[5] Eardi Lila, John A.D. Aston, Sangalli, Laura M. Sangalli (2016), "Smooth Principal Component Analysis over two-dimensional manifolds with an application to Neuroimaging", *Annals of Applied Statistics*, 10 (4), 1854–1879.

[6] Bree Ettinger, Simona Perotto, Laura M. Sangalli (2016), "Spatial regression models over two-dimensional manifolds", *Biometrika*, 103 (1), 71–88.

[7] Matthieu Wilhelm, Laura M. Sangalli (2016), "Generalized Spatial Regression with Differential Regularization", *Journal of Statistical Computation and Simulation*, 86 (13), 2497–2518.

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