Curriculum Vitae

Raffaele Argiento

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Personal

Full name: Raffaele Argiento
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Current Academic Positions

- Assistant Professor of Statistics (Rtd-B) at *Dipartimento di Scienze Economico-Sociali e Matematico-Statistiche* (ESOMAS – Department of Economic, Social, Mathematical and Statistical Sciences) of University of Torino, Torino, Italy.
- From Jenuary to May 2019, Visiting Assistant professor at Division of Science of the Yale - National University of Singapore.
- Member of the de Castro Statistics initiative at Collegio Carlo Alberto Torino Italy.
- Fellows of *Consiglio Nazionale delle Ricerche* (Italian National Council of Research). Institute for Applied Mathematics and Information Technologies (CNR-IMATI).
- National habilitation to become associate professor in Statistics (*settore scientifico-disciplinare 13/D1-Statistica*) for Italian universities. Validity: form 10/02/2014 to 10/02/2020.

Research Interests

My research interests are mainly focused on Bayesian inference (parametric and nonparametric), with emphasis on modelling and computational aspects. My main activity concerns mixture models for cluster analysis. From the application point of view, my work concerns probability an statistics for biology, health care management, medicine and engineering.

Experience

Sept 2015 – Aug. 2016	Lecturer in Statistics at University of Kent, School of Mathematics, Statistics and Actuarial Sciences, Canterbury (UK).
Jan. 2008 – Sept. 2016	Researcher at the Milano branch of the Institute for Applied Mathematics and Information Technologies "E. Magenes" of the Italian National Research Council (CNR-IMATI), Milan (Italy) .

Oct. 2005 - Dec. 2008	Post-doc fellowship at the Milano branch of the Institute for Applied Mathematics and Information Technologies of the Italian National Research Council (CNR-IMATI). From April to December 2007 the position was founded by "Sovvenzione Globale INGENIO", a project of *Regione Lombardia* founded by the European Social Fund 2000-2006.
Sept. 2004 - Jun. 2005	Visiting scholar at *Math Department* of *University of Pennsylvania*, Philadelphia (PA) U.S.A. Supervisor: Prof. R. Pemantle
Jan. 2002 - Sept. 2002	Scholarship holder for a research project: "Probabilistic and statistical analysis of random point processes". CNR-IAMI (now CNR-IMATI), Milan.

Education

Sept. 2002 - Apr. 2007	Ph.D. in Statistics, University "L. Bocconi", Milano (Italy). Dissertation: "*Bayesian Semiparametric Inference for Accelerated Failure Time Models*" Advisers: Dr. A. Pievatolo and Prof. S. Petrone
Jan. 2001 - Dec. 2001	M.Sc. in Applications of Mathematics in Industry and Services, Bicocca University, Milano. Dissertation: "*Survival Analysis, an Application to Underground Trains*". Adviser: Dr. Antonio Pievatolo
Oct. 1994 - Jun. 2000	Bachelor degree (M.Sc. level) in Mathematics, University "Federico II", Napoli. Thesis: "*Inclusioni Differenziali e Teoria del Controllo*" (Differential Inclusions and Control Theory). Adviser: Prof. J. Morgan

Research Projects

2018-19	*Principal investigator – University of Torino – ESOMAS Department research project* Dependent models in Bayesian Nonparametric Statistics: computational aspects.
2017-18	*Principal investigator – University of Torino – ESOMAS Department research project* Methodological and computational problems in Modern Bayesian nonparametric inference.
2016-2017	*Individual project – University of Torino – Young Excellence ESOMAS Department research project* Bayesian nonparametric cluster analysis, new challanges in the "big data" era.
2013-15	*Co-investigator – Framework agreement betweenRegione Lombardia and CNR*: INTEGRATE - Innovazioni Tecnologiche per una Gestione Razionale del Tessuto Edilizio (*Technologial innovations for a rational management of the built environment*).
2014	*Co-investigator – Flagship project, CNR & MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca), Factory of the Future*: Hospital factory for manufacturing customized, patient specific 3D anatomo-functional model and prostheses – Fab@Hospital.
2012-13	*Joint principal investigator – Bilateral agreement CNR (Italy)/NSC (Taiwan)*: Bayesian Statistical Methods in Clustering Single Nucleotide Polymorphisms.
2012-13	*Joint principal investigator – Bilateral agreement CNR (Italy) /CNPq (Brasile)*: Spatial partitions models in the construction of maps for neonatal deaths in Minas Gerais.
2011	*Co-investigator – Joint project CNR - Lombardia Region Regione*: Nuove tecnologie e strumenti per l'efficienza energetica e l'utilizzo delle fonti rinnovabili negli usi finali civili. (*New tools and technologies for energy efficiency and the use of renewable sources in residential buildings*).

2007 *Principal Investigator* – Project of *Regione Lombardia* founded by the European Social Fund 2000-2006, *Sovvenzione globale INGENIO*: Survival Analysis.

Teaching for Bachelor programs and Masters of Science

Since 2017 *M.Sc Stochastics and Data Science* – University of Torino. Lecturer of the course: "Bayesian Statistics" cod. MAT0070 (in English).

Since 2016 *M.Sc Quantitative Finance and Insurance* – University of Torino. Lecturer Course: "Numerical and Statistical Method for Finance" cod. ECO0152 (In English).

A.A. 2016-17 *B.Sc Business Economics* – University of Torino. Lecturer of the course *Statistica per l'Azienda* cod MAN0048 (in Italian).

A.A. 2015-16
- *B.Sc. in Statistics* University of Kent. Lecturer of the course Applied Bayesian Modelling;
- *M.Sc. in Statistics* University of Kent. Lecturer of the module Stochastic Models in Ecology and Medicine (Survival Analysis part).

A.A. 2014-15 *M.Sc Mathematical Engineering* – Polytechnic of Milano. Teaching assistant and lab with R and WinBUGS within the course "Statistica Bayesiana", cod. 085941 (in Italian).

A.A. 2013-14 *M.Sc Mathematical Engineering* – Polytechnic of Milano. Teaching assistant and lab with R and WinBUGS within the course "Statistica Bayesiana", cod. 085941 (in Italian).

A.A. 2012-13 *M.Sc Mathematical Engineering* – Polytechnic of Milano. Teaching assistant and lab with R and WinBUGS within the course "Statistica Bayesiana", cod. 085941 (in Italian).

A.A. 2011-12
- *M.Sc Mathematical Engineering* – Polytechnic of Milano. Teaching assistant and lab with R and WinBUGS within the course "Statistica Bayesiana", cod. 085941 (in Italian);
- *M.Sc Computer Engineering* – Polytechnic of Milano. Teaching assistant within the course "Statistica" cod. 089085.

A.A. 2010-11
- *M.Sc Mathematical Engineering* – Polytechnic of Milano. Teaching assistant and lab with R and WinBUGS within the course "Statistica Bayesiana", cod. 085941 (in Italian).
- *M.Sc Computer Engineering* – Polytechnic of Milano. Teaching assistant within the course "Statistica" cod. 089085.

A.A. 2009-10
- *B.Sc Computer Engineering* – Polytechnic of Milano. Teaching assistant within the course "Statistica" cod. 072900;
- *B.Sc Mechanical engineering* – Lab with "R" within the courses "Statistica" cod. 086449 (in Italian), and Statistics cod. 086599 (in English).

A.A. 2008-09
- *B.Sc Computer Engineering* – Polytechnic of Milano. Teaching assistant within the course "Statistica" cod. 072900;
- *B.Sc Aerospace Engineering* – Polytechnic of Milano Teaching assistant and lab with R within the courses "Statistica Matematica A" cod. 061450 (in Italian).

A.A. 2007-08
- *B.Sc Business Economics* University "L.Bocconi", Teaching assistant within the course "Statistica", cod. 6045;
- *B.Sc Aerospace Engineering* Polytechnic of Milano. Teaching assistant and lab with R within the courses "Statistica Matematica A" cod. 061450 and "Statistica" cod. 072900.

A.A. 2005-07
- *B.ScBusiness Economics* University "L.Bocconi". Tutor within the courses "Statistica", cod. 5047 e 5067;
- *B.Sc Aerospace Engineering* – Polytechnic of Milano. Statistical lab with Excel cod.061450;
- *B.Sc Computer Engineering* – Polytechnic of Milano. Teaching assistant within the course "Statistica" (2L) cod. 072900.

Graduate Teaching (In English)

Since 2016	*Allievi Honors Program*, Collegio Carlo Alberto, Torino. Course:"Introduction to Bayesian Statistics".
Since 2014	*Ph.D. in Statistics and Mathematical Finance*, Department of Department of Statistics and Quantitative Methods – Bicocca University, Milano. Course: "Computational Statistics, modulus in MCMC & Computational Bayesian methods".
Oct. 2016	*Ph.D. in Statistics*, Department of Statistic of the *Universidade Federal de Minas Gerais*, Belo Horizonte – Brazil. Course "Bayesian Nonparametric Modeling and Data Analysis: an Introduction".
From 2012 to 2015	*Ph.D. Statistics and Ph.D. in Economics & Finance* – University "L.Bocconi", Milano. Lab with R within the course "Introduction Statistics".
Jul. 2013	*Applied Bayesian Statistics School* (ABS13). Lab with R and Jags within the course "Bayesian Methods for Variable Selection with Applications to High-dimensional Data", main lecturer prof. Marina Vannucci, Department of Statistics, Rice University, Houston, TX USA.
Set. 2012	*Applied Bayesian Statistics School* (ABS12). Lab with R and Jags within the course "Stochastic modelling for Systems Biology ", main lecturer prof. Darren Wilkinson, School of Mathematics and Statistics, Newcastle University, UK.
Jul. 2011	*Applied Bayesian Statistics School* (ABS11). Lab with R and WinBugs within the course "Hierarchical modeling for environmental processes", main lecturer prof. Alan Gelfand, Department of Statistical Science, Duke University, NC USA.
Jul. 2010	*Applied Bayesian Statistics School* (ABS10), Lab with R and WinBugs within the course "Bayesian machine learning with biomedical applications", main lecturer prof. David Dunson, Department of Statistical Science, Duke University, NC USA.

Visiting

Aug. 2018	"University of California Irvine", Department of Statistics – Irvine, Orange County, CA (USA).
May. 2018	"University College London", Department of Statistics – London (UK).
Oct. 2016	"Universidade Federal de Minas Gerais", Instituto de Ciências Exatas, Departamento de Estatística. Belo Horizonte (Brazil).
Jun. 2014	"Rice University", Department of Statistics at Rice University, Houston, TX (USA).
Mar. 2014	"Universidade Federal de Minas Gerais", Instituto de Ciências Exatas, Departamento de Estatística. Belo Horizonte (Brazil).
Feb. 2013	"Departamento de Estatística", Instituto de Matemática e Estatística, Universidade de São Paulo. São Paulo (Brazil).
Oct. 2013	"Institute of Epidemiology and Preventive Medicine", College of Public Health, National Taiwan University. Taipei (Taiwan).
Sept. 2012	"Institute of Epidemiology and Preventive Medicine", College of Public Health, National Taiwan University. Taipei (Taiwan).
A.Y. 2004/05	"Visiting scholar" Math. Department, University of Pennsylvania, Philadelphia, PA (USA).

Invited Talks at Conference

Jun. 2019	Invited for a plenary talk to BISP11 – *11^{th} International Workshop on Bayesian Inference in Stochastic Processes*, Madrid 12-14 June, Spain.
Dec. 2018	Invited to CMStatistics 2018 – *11^{th} International Conference of the ERCIM WG on Computational and Methodological Statistics*, Pisa, 14-16 December , Italy.
Jul. 2018	JSM 2018 – *Joint Statistical Meetings* Vancouver, Canada.
Jun. 2018	ISBA 2018 – *International Society for Bayesian Analysis World Meeting*, Edinburgh, United Kingdom.
Jun. 2018	EcoSta 2018 – *2^{nd} International Conference on Econometrics and Statistics*, Hong Kong.
Dec. 2017	IISA 2017 – the annual conference of the *International Indian Statistical Association*, Hyderabad, India.
Dec. 2017	CMStatistics 2017 – *10^{th} International Conference of the ERCIM WG on Computational and Methodological Statistics*, London, United Kingdom.
Jul. 2017	ISI 2017 – *62^{th} World Statistics Congress*, Marracheck, Morocco.
Dec. 2016	CMStatistics 2016 – *9^{th} International Conference of the ERCIM WG on Computational and Methodological Statistics*, Sevilla, Spain.
Jul. 2016	SIS 2016 – *48^{th} Scientific Meeting of the Italian Statistical Society*, Salerno, Italy.
Jun. 2016	48èmes *Journées de Statistique de la Société Française de Statistique (SFdS)* Montpellier, France

Dec. 2015	CMStatistics 2015 – *8^{th} International Conference of the ERCIM WG on Computational and Methodological Statistics*, London, United Kingdom.
Oct. 2015	CLADAG 2015 – *10^{th} Scientific Meeting of the Classification and Data Analysis Group*, S. Margherita di Pula, Cagliari, Italy.
Jul. 2015	ISI 2015 – *60^{th} World Statistics Congress*, Rio de Janeiro, Brazil.
Jul. 2015	ISBIS – *International Society for Business and Industrial Statistics, Satellite Conference with Focus on Quality Control and Improvement*, Campinas, Sao Paulo State, Brazil.
Sept. 2014	ENBIS 2014 – *14^{th} Annual Conference of the European Network for Business and Industrial Statistics*, Linz, Austria.
Jul. 2014	ISBA 2014 – *International Society for Bayesian Analysis World Meeting*, Cancun, Mexico.
Jun. 2014	SIS 2014 – *47^{th} Scientific Meeting of the Italian Statistical Society*, Cagliari, Italy.
Sept. 2013	ENBIS 2013 – *13^{th} Annual Conference of the European Network for Business and Industrial Statistics*, Ankara, Turkey.
Jan. 2013	ISBA-IWCBTA – *Regional Meeting and International Workshop/Conference on Bayesian Theory and Applications*, Varanasi, India.
Jun. 2012	ISBA 2012 – *International Society for Bayesian Analysis World Meeting*, Kyoto, Japan.
Sept. 2011	BISP7 – *7^{st} Workshop on Bayesian Inference in Stochastic Processes*, Getafe, Spain.

Invited Talks

- Julay 2016 – *Imperial College – Population Health and Occupational Disease Department*, London (UK).
- May 2015 – *Università Commerciale "L. Bocconi", Dipartimento di Scienze delle Decisioni*, Italia.
- Julay 2014 – *University of Texas at Austin, Department of Mathematics*, USA.
- September 2013 – *Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University*, Taiwan.
- March 2014 – *Universidade Federal de Minas Gerais, Instituto de Ciências Exatas, Departamento de Estatística*, Brazil.
- December 2012 – *NTUST, National Taiwan University of Science and Technology*, Taiwan.

Publication in refereed Journals

- Argiento R., Ruggiero, M. (2018). "Computational challenges and temporal dependence in Bayesian nonparametric models", *Statistical Methods and Applications*, Volume 27, pp 231-238. doi: 10.1007/s10260-017-0397-8
- Wadsworth W.D., Argiento R., Guindani M., Galloway-Pena J., Shelbourne S.A., Vannucci M. (2017). "An integrative Bayesian Dirichlet-multinomial regression model for the analysis of taxonomic abundances in microbiome data", *BMC Bioinformatics*, Volume 18, pp 1-12. doi: 10.1186/s12859-017-1516-0
- Wang, C., Hsiao, K., Ruggeri, F., Argiento, R. (2017). "Bayesian Nonparametric Clustering and Association Studies for Candidate SNP Observations", *International Journal of Approximate Reasoning*, Volume 80, pp 19-35. doi:10.1016/j.ijar.2016.07.014
- Argiento, R., Guglielmi, A., Lanzarone, E., Nawajah, I. (2017). "Joint prediction of health status and demand for patient in home care services: a Bayesian approach", *IMA Journal of Management*

Mathematics, Volume 28, Issue 4, pp 531-552. doi: 10.1093/imaman/dpw001.

- Argiento, R., Bianchini, I. Guglielmi, A. (2016). "Posterior sampling from epsilon-approximation of normalized completely random measure mixtures", *Electronic Journal of Statistics*, Volume 10, Issue 2, pp 3516-3547. doi:10.1214/16-EJS1168.
- Argiento R., Bianchini, I., Guglielmi, A. (2016). "A blocked Gibbs sampler for NGG-mixture models via a priori truncation", *Statistics and Computing*, Volume 26, Issue 3, pp 641-661. doi: 10.1007/s11222-015-9549-6
- Argiento R., Guglielmi A., Lanzarone E., Nawajah I. (2016). "A Bayesian framework for describing and predicting the stochastic demand of home care patients". *Flexible Services and Manufacturing Journal*, Volume 28, Issue 1, pp 254-279. doi: 10.1007/s10696-014-9200-4
- Bianchini, I., Argiento, R., Auricchio, F., Lanzarone E. (2015). "Efficient uncertainty quantification in stochastic finite element analysis based on functional principal components", *Computational Mechanics*, Volume 56, Issue 3, pages 533-549. doi: 10.1007/s00466-015-1185-7.
- Argiento, R., Bissiri, P. G., Pievatolo, A., Scrosati, C. (2015). "Multilevel functional principal component analysis of façade sound insulation data", *Quality and Reliability Engineering International, John Wiley & Sons* , Volume 31, Issue 7, pages 1239-1253, doi: 10.1002/qre.184
- Argiento, R., Cremaschi, A., Guglielmi A. (2014). "A "Density-Based" Algorithm for Cluster Analysis Using Species Sampling Gaussian Mixture Models", *Journal of Computational and Graphical Statistics*, Volume 23 Issue 4, pp 1126-1142. doi: 10.1080/10618600.2013.856796
- Argiento, R., Guglielmi, A., Pievatolo, A. (2014). "Estimation, prediction and interpretation of NGG random effects models: an application to Kevlar fibre failure times." *Statistical Papers*: Volume 55, Issue 3, pp 805-826. doi: 10.1007/s00362-013-0528-8
- Argiento, R., Guglielmi, A., Soriano, J. (2013). "A semiparametric Bayesian generalized linear mixed model for the reliability of Kevlar fibers", *Applied Stochastic Models in Business and Industry.* Volume 29, Issue 5, pp 410-423. doi: 10.1002/asmb.1936
- Argiento, R., Faranda, R., Pievatolo A., Tironi, E. (2012). "Distributed Interruptible Load Shedding and Micro-Generator Dispatching to Benefit System Operations", *IEEE Transactions on Power Systems*, Volume 27, Issue 2, pp. 840-848. doi: 10.1109/TPWRS.2011.2173217
- Argiento, R., Guglielmi, A., Pievatolo, A. (2010). "Bayesian density estimation and model selection using nonparametric hierarchical mixtures". *Computational Statistics & Data Analysis*, Volume 54, Issue 4, pp. 816-832. doi: 10.1016/j.csda.2009.11.002
- Argiento, R., Guglielmi, A., Pievatolo, A. (2009). "A comparison of nonparametric priors in hierarchical mixture modelling of lifetime data". *Journal of Statistical Planning and Inference*, Volume 139, Issue 12, pp. 3989-4005. doi: 10.1016/j.jspi.2009.05.004
- Argiento, R., Pemantle, R., Skyrms, B., Volkov, S. (2009). "Learning to signal: analysis of a micro-level reinforcement model". *Stochastic Processes and their Applications.* Volume 119, Issue 2, pp. 373-390. doi: 10.1016/j.spa.2008.02.014
- Pievatolo, A., Ruggeri, F., Argiento R. (2003). "Bayesian analysis and prediction of failures in underground trains", *Quality and Reliability Engineering International, John Wiley & Sons* , Volume 19, Issue 4, pp. 327-336. doi: 10.1002/qre.583

Book Chapters

- Argiento, R. (2016). "Credible Interval", in Wiley StatsRef: Statistics Reference, ID Stat 07830, doi: 10.1002/9781118445112.stat07830

- Argiento, R., Guglielmi, A., Hsiao, C.K., Ruggeri, F., Wang C. (2015). "Modelling the association between clusters of SNPs and disease responses". in *Nonparametric Bayesian Methods in Biostatistics and Bioinformatics* (R. Mitra, P. Mueller Eds.), Springer. ISBN: 978-3-319-19517-9
- Argiento, R., Pemantle, R., Skyrms, B., Volkov, S. (2014). "Learning to signal: analysis of a micro-level reinforcement model" Reprint with the kind permission of the original publisher in *Social Dynamics*, Brian Skryrms (eds). Oxford University Press, United Kingdom. ISBN: 978-0-19-965282-2 (hbk.)
- Argiento, R., Guglielmi, A., Ieva, F., Parodi, A. (2013). "Analysis of hospitalizations of patients affected by chronic heart disease". In *The contribution of young researchers to Bayesian statistics - Proceedings of BAYSM2013* Springer Proceedings in Mathematics & Statistics, vol. 63, p. 1-5.; ISBN 978-3-319-02083-9
- Argiento, R., Guglielmi, A., Lanzarone, E., Nawajah, I. (2013). "Bayesian analysis and prediction of patients' demands for visits in home care". In *The contribution of young researchers to Bayesian statistics - Proceedings of BAYSM2013.* Springer Proceedings in Mathematics & Statistics, vol. 63, p. 1-7. ISBN 978-3-319-02083-9
- Argiento R., Guglielmi A., Pievatolo A. (2010). "Mixed-effects modelling of Kevlar fibre failure times through Bayesian nonparametrics". In *Complex Data Modeling and Computationally Intensive Statistical Methods*, Mantovan P., Secchi, P. (eds). Springer Physica Verlag (Germania, Heidelberg) pp 13-26. ISBN: 978-88-470-1385-8
- Ruggeri, F., Pievatolo, A., Argiento, R. (2003). "On a Bayesian model for failure prediction in underground trains". In: *Safety & Reliability.* vol. 2, Maastricht (NL), pp. 1345-1349, ISBN 9058095517.

Books

- Argiento, R., Lanzarone, E., Villalobos Antoniano, I., Mattei, A. (Edited by) (2017). *Bayesian statistics in action - Proceedings of BAYSM 2016.* Springer Proceedings in Mathematics & Statistics, Vol 194. Springer Interantional Publishing, doi: 10.1007/978-3-319-54084-9
- Argiento R., Durante D., Wade, S. (Edited by) (2019). *Bayesian Statistics: New Challenges and New Generations - BAYSM 2018* To be published for the series Springer Proceedings in Mathematics & Statistics. Springer Interantional Publishing

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Proceedings

- Argiento, R., Bianchini, I., Guglielmi, A. and Lanzarone, E. (2018). Bayesian nonparametric covariate driven clustering. Proceedings of 49th SIS Scientific Meeting of the Italian Statistica Society Palermo, June 20-22, 2018.
- Argiento, R. (2016). "A conditional algorithm for Bayesian finite mixture models via normalized point process". Proceedings of 48th SIS Scientific Meeting of the Italian Statistica Society Salerno, June 8-10, 2016. ISBN: 978-88-6197-061-8
- Argiento, R., Guglielmi, A., Hsiao, C.K., Ruggeri, F., Wang C. (2016). "A Baysian nonparametric Approach to Model Association between Clusters of SNPs and Disease Responses". Book of abstracts of CLADAG 2015, 10th Scientific Meeting of the Classification and Data Analysis Group of the Italian Statistical Society, October 8-10, 2015. ISBN: 978-88-84-67-949-9
- Argiento, R., Bianchini, I., Guglielmi, A. (2014). "A Bayesian nonparametric model for density and cluster estimation: the ε-NGG process mixture". Proceedings of 47th SIS Scientific Meeting of the Italian Statistica Society Cagliari, June 10-14, 2014. ISBN: 978-88-8467-874-4
- Argiento, A., Guglielmi, A. (2014). "Bayesian principal curve clustering by species-sampling mixture models" Proceedings of 47th SIS Scientific Meeting of the Italian Statistica Society Cagliari, June 10-14, 2014. ISBN: 978-88-8467-874-4

- Nawajah, I., Argiento, R., Guglielmi, A., Lanzarone E. (2014). "Joint Prediction of Demand and Care Duration in Home Care Patients: a Bayesian Approach" Proceedings of 47th SIS Scientific Meeting of the Italian Statistica Society Cagliari, June 10-14, 2014. ISBN: 978-88-8467-874-4

- Nawajah, I., Argiento, R., Guglielmi, A., Lanzarone, E. (2013). "Estimating patient demand progression in home care: a Bayesian modeling approach". *Proceedings of the 39th Conference on Operational Research Applied to Health Services* (ORAHS 2013), p. 44-47. ISBN 978-605-64131-0-0.

- Argiento, R., Cremaschi, A., Guglielmi, A. (2013). "Cluster analysis of curved-shaped data with species-sampling mixture models". *Proceedings of SCo2013 - Complex Data Modeling and Computationally Intensive Statistical Methods for Estimation and Prediction.* Milano (ITALY), 9-11 September 2013. ISBN: 9788864930190

- Nawajah, I.,Argiento, R. Guglielmi, A., Lanzarone, E. (2013). "A Bayesian approach for modeling patient's demand and hidden health status: an application to Home Care". *Proceedings of SCo2013 - Complex Data Modeling and Computationally Intensive Statistical Methods for Estimation and Prediction.* ISBN:9788864930190

- Argiento, R., Guglielmi, A., Pievatolo, A. (2009). "A semiparametric Bayesian Mixed-effects Model for Failure Time Data". *Proceedings of SCo209 - Complex Data Modeling and Computationally intensive Statistical Methods for Estimation and Prediction.* ISBN: 9788838743851, Milano. pg 17-22.

- Argiento, R., Pievatolo, A., Ruggeri, F., Guglielmi, A. (2007). " Bayesian semiparametric inference for the AFT model, using N-IG mixture prior". In: *Rischio e Previsione (Risk and Prediction).* ISBN: 9788861290938, Venezia, p. 569-570,

- Argiento, R., Guglielmi, A., Pievatolo, A., Ruggeri, F. (2006). "Bayesian semiparametric inference for the accelerated failure time model using hierarchical mixture modeling with N-IG priors", *2006 Proceedings of the American Statistical Association*, Seattle (USA).

- Argiento, R., Cagno,E., Caron, F., Mancini, M., Pievatolo, A., Ruggeri, F. (2002). "Seasonal patterns and double measurement scale in modelling failures in underground trains", *MMR'2002 - 3rd International Conference on Mathematical Methods in Reliability* (H. Langseth and B. Lindqvist, Eds.), pag. 45-48, NTNU.

Preprints

- Argiento, R., Cremaschi, A., Vannucci, M. "Hierarchical Normalized Completely Random Measures to Cluster Grouped Data", *Revised for Journal of American Statistical Association – Theory and Methods.* Preprint available: https://www.carloalberto.org/wp-content/uploads/2018/12/no.557.pdf

- Argiento, R., Cremaschi, A., Vannucci, M. "A hierarchical nonparametric approach for robust graphical modelling" *Invited revision for Bayesian Analysis.*
  Preprint available: https://www.carloalberto.org/wp-content/uploads/2018/12/no.558.pdf

- Argiento, A. , Oliveira G.L., Loschi. R. H., Branco, M., Ruggeri, F. "Modeling underreported counts using auxiliary clustering variables". *Submitted to Biometrics.*

- Mathechou, E., Argiento, R. " Hierarchical Normalized Completely Random Measures for Robust Graphical Modeling". *To be submittet to Journal of American Statistical Association – Applications and Case Studies.*

- Argiento, R., Bianchini, I., Guglielmi, A. "Bayesian nonparametric covariate-driven clustering: An application to blood donors data" *to be submitted to Biostatistics.*

- Argiento, R., Bianchini, I., Griffin, J. " Exploiting conjugacy to build time dependent completely random measures "*In preparation.*

Services

Adviser of Ph.D. Thesis and Postdoc Projects

- Postdoc supervisor of Alessandro Lanteri. Project "Dependent Nonparametric priors for microbiome studies". Postdoctoral fellow founded by University of Torino and Collegio Carlo Alberto.
- Ph.D. supervisor of Claudia Berloco (second year). Project "Early warning system for default events detection, a Bayesian approach". Industrial Ph.D. Program in *Modeling and Data Science*, University of Torino.
- Ph.D. co-supervisor of Ilaria Bianchini (2018). Project "Modeling and computational aspects of dependent completely random measures in Bayesian nonparametric statistics". Ph.D. in *Mathematical Models and Methods in Engineering,* Polytechnic of Milano.
- External examiner, Ph.D. in Statistics (2017). University College London.
- Ph.D. co-supervisor of Inad Nawajah (2014). Project "Bayesian analysis of Home Care longitudinal data". Ph.D. in *Mathematical Models and Methods in Engineering,* Polytechnic of Milano.

Adviser Master's Thesis

- Samuele Bertaina (2018), "Bayesian Functional Regression with application to shot put data". MSc. in Stochastics and Data Science, University of Torino
- Michele Angelo Tasca (2018), "Variational inference methods for Bayesian nonparametric models" M.Sc. in Engineering Mathematics, Polytechnic of Milano Milano (co-supervised with A. Guglielmi).
- Alessio Maglione (2018), "Luxury brand communication: caratteristiche e specificità degli influencer e degli user-generated- content", M.Sc. in *Direzione d'Impresa, Marketing e Strategia*, University of Torino (co-supervised with F. Mosca).
- Gabriele Mosaico (2017), "Design and implementation of an innovative hybrid technique for an accurate photovoltaic generation forecasting". M.Sc. in Stochastics and Data Science, University of Torino.
- Alberto Macchi (2015), "Clustering attraverso modelli mistura di curve bayesiane principali". M.Sc. in Engineering Mathematics, Polytechnic of di Milano Milano (co-supervised with A. Guglielmi).
- Ilaria Bianchini (2014), "A Bayesian nonparametric model for density and cluster estimation: the ε-NGG mixture model". M.Sc. in Engineering Mathematics, Polytechnic of Milano.
- Andrea Cremaschi (2012), "Model-based clustering via Bayesian nonparametric mixture models.". M.Sc. in Engineering Mathematics, Politecnico di Milano (co-supervised with A. Guglielmi).
- Jacopo Soriano (2010), "Bayesian semiparametric approaches to mixed-effects models with an application in reliability analysis". M.Sc. in Engineering Mathematics, Polytechnic of Milano (co-supervised with A. Guglielmi).

Board

- Review editors of *The Journal of Data Mining & Digital Humanities.* https://jdmdh.episciences.org/
- Member of the Internship and Orientation Committee (Comm. Stage e Orientamento) for the M.Sc in Stochastics and Data Science – Polytechnic of Torino.
- Member of the academic board of the industrial *Ph.D. program in Modeling and Data Science*, Polytechnic of Torino.
- From 2014 to 2017, member of the academic board of the *Ph.D. program in Statistics and Mathematical Finance*, Bicocca University Milano.

- Executive director of the *Applied Bayesian Statistical School*.
  http://web.mi.imati.cnr.it/conferences/abs19/past_editions.htm
- Member of the *BAyesian Young Statisticians Meeting* board.
  http://www.baysm.org/

Organization of Scientific Events

- Since (2016), Organizer of three-session track "Bayesian semi- and nonparametric modelling" for CM-Statistics, the International Conference of the ERCIM WG on Computational and Methodological Statistics. Joint with M. Ruggiero (Un. of Torino) and Li Ma (Duke Un.). Pisa, Italy 14-16 Dec 2018; London, UK (16-18 Dec 2017); Seville, Spain (9-11 Dec 2016).
- Program chair of the fifth *BAyesian Young Statisticians Meeting* to be held the 26-27 of June in Kunming – Yunnan (China).
- Senior member of the board of the fourth *BAyesian Young Statisticians Meeting* – Warwick 2-3 July 2018.
- Program Chair of the third *BAyesian Young Statisticians Meeting* – Florence in 19-21 June 2016.
- Since 2012 member the organizing committee of the *Applied Bayesian Statistics School*.

Referee

- Annals of Statistics, Bayesian Analysis, Biometrical Journal, Biometrics, Communications in Statistics, Computational Statistics and Data Analysis, Electronic Journal of Statistics, European Transactions on Electrical Power, IEEE Robotics and Automation Letters, IEEE Transcation on Power Systems, Journal of Computational and Graphical Statistics, Statistical Science, Statistics and Computing.

Scientific Societies membership

- ISBA "International Society for Bayesian Analysis".
  https://bayesian.org/
- SIS "Società Italiana di Statistica".
  https://www.sis-statistica.it/
- ENBIS "European Network for Business and Industrial Statistics".
  https://enbis.org/
- From 2013 to 2016 treasurer of IS-ISBA the "ISBA Section on Industrial Statistics".

Il sottoscritto esprime il proprio consenso affinché i dati personali forniti possano essere trattati nel rispetto del D. Lgs. n. 196/2003, per gli adempimenti connessi alla presente procedura selettiva.

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