

# MATTEO RUGGIERO

## Curriculum Vitae

August, 2020

### University of Torino

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### Collegio Carlo Alberto

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## Academic positions

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### Current positions

Professor of Statistics, Un. of Torino (2020-)

Scientific Director, “de Castro” [Statistics Initiative](#), Collegio Carlo Alberto (2017-)

Coordinator for Mathematics and Statistics, [Allievi Honors Program](#), Collegio Carlo Alberto (2016-)

Deputy Coordinator and Chair of Admissions, [Laurea Magistrale \(M.Sc.\) in Stochastics and Data Science](#), Un. of Torino (2015-)

[Carlo Alberto Affiliate](#), Collegio Carlo Alberto (2012-)

### Past positions

Associate Professor of Statistics, Un. of Torino (2016-2020)

Assistant Professor of Statistics, Un. of Torino (2011-2016)

Assistant Professor of Statistics, Un. of Pavia (2008-2011)

Adjunct Faculty, Allievi Honors Program, Collegio Carlo Alberto (2007-2013)

Adjunct Faculty, Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino (2007-2013)

Research Affiliate, “de Castro” [Statistics Initiative](#), Collegio Carlo Alberto (2010-2017)

Postdoctoral Fellow, Un. of Torino (2007-2008)

## Education

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PhD in Statistics, Bocconi University (2007)

Laurea *cum laude* in Economic and Social Disciplines (DES), Bocconi University (2003)

## Research-related activities

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### Direction of research groups

2017- Scientific Director, Research Center “de Castro” [Statistics Initiative](#), hosted at Collegio Carlo Alberto

2017-20 Coordinator of the Un. of Torino local research unit of the National Research Project (PRIN 2015) *Modern Bayesian nonparametric methods*. National coordinator: Igor Prünster.

2018 Coordinator of the ESOMAS Dept. Research Project *Dependent models in Bayesian nonparametric statistics: computational aspects*, Un. of Torino. Research team: Raffaele Argiento, Luigi Bollani, Pierpaolo De Blasi, Stefano Favaro, Guillaume Kon Kam King.

- 2017 Coordinator of the ESOMAS Dept. Research Project *Methodological and computational problems in modern Bayesian nonparametric inference*, Un. of Torino. Research team: Raffaele Argiento, Luigi Bollani, Antonio Canale, Pierpaolo De Blasi, Stefano Favaro, Guillaume Kon Kam King.
- 2015 Coordinator of the ESOMAS Dept. Research Project *Random probability measures and their applications*, Un. of Torino. Research team: Raffaele Argiento, Luigi Bollani, Antonio Canale, Pierpaolo De Blasi, Stefano Favaro, Guillaume Kon Kam King, Mauro Reginato.
- 2014 Coordinator of the ESOMAS Dept. Research Project *New statistical methods for data with complex structures*, Un. of Torino. Research team: Luigi Bollani, Antonio Canale, Pierpaolo De Blasi, Stefano Favaro, Guillaume Kon Kam King, Bernardo Nipoti, Igor Prünster, Mauro Reginato.
- 2013 Coordinator of the ESOMAS Dept. Research Project *Statistical methodology and analysis for data with dependence structures*, Un. of Torino. Research team: Luigi Bollani, Antonio Canale, Pierpaolo De Blasi, Stefano Favaro, Consuelo Nava, Bernardo Nipoti, Igor Prünster, Mauro Reginato.

### **Participation to research groups**

- 2012-16 Co-investigator of the European Research Council (ERC) project *New directions in Bayesian nonparametrics*. Research team: Pierpaolo De Blasi, Stefano Favaro, Antonio Lijoi, Igor Prünster (PI), Matteo Ruggiero.
- 2010-12 Co-investigator of the Carlo Alberto Research Project *New approaches to stochastic modeling in Economics via Bayesian nonparametrics*. Principal investigator: Igor Prünster.
- 2008-10 Co-investigator of the National Research Project (PRIN 2008) *Bayesian nonparametric inference and limit theorems for dependent data*. National coordinator: Eugenio Regazzini.
- 2008 Co-investigator of the research project *Infinite population asymptotics in Bayesian nonparametrics*, funded by CRT Foundation, Torino. Project supervisors: Massimo Marinacci and Igor Prünster.
- 2007 Co-investigator of the research project *Ambiguity and evolution by means of urn models*, funded by CRT Foundation, Torino. Project supervisors: Massimo Marinacci and Igor Prünster.
- 2006-08 Co-investigator of the National Research Project (PRIN 2006) *Bayesian nonparametric methods for clustering, survival analysis and predicting the number of species*. National coordinator: Igor Prünster.

## Editorial activity

- *Referee for*: AISTATS, Annals of Applied Statistics, Applied Mathematics E-Notes, Applied Stochastic Models in Business and Industry, Bayesian Analysis, Biometrika, Communications in Statistics, Computational Statistics and Data Analysis, Decisions in Economics and Finance, Dependence Modeling, IEEE Transactions on Computers, IEEE Transactions on Pattern Analysis & Machine Intelligence, International Journal of Stochastic Analysis, Journal of Applied Probability, Journal of Applied Statistics, Journal of the American Statistical Association, Journal of the Royal Statistical Society, Mathematical Problems in Engineering, Psychometrika, Quality Technology and Quantitative Management, Statistical Methods & Applications, Statistics and Probability Letters, Stochastic Models, Stochastic Processes and Their Applications.
- *Reviewer for*: Mathematical Reviews/MathSciNet (2010-15).
- *Project evaluator*: Un. of Florence (2016); Italian Ministry of University and Research (2013).

## Doctoral and prize committees

- Board Member, PhD in Modeling and Data Science, Un. of Torino, Italy (May 2017-current)
- Committee Member, *L.J. Savage Award* for outstanding doctoral dissertations in Bayesian econometrics and statistics, International Society for Bayesian Analysis (2016)
- External examiner, MPhil in Mathematics, Un. of Warwick, UK (2015)
- Board Member, PhD in Statistics, Bocconi Un., Italy (Set 2013-May 2017)
- Member of the evaluation committee (*Comité tutorial*), PhD in Mathematical Sciences, UNAM, Mexico (Set 2013-current)

## Organizational roles at conferences

### *Scientific and Organizing Committees*

- Scientific Committee, *ISBA World Meeting*, Montreal, Canada (2022)
- Organizing Committee, *4th Carlo Alberto Stochastics Workshop*, Torino (18-19 Apr 2019)
- Scientific Committee, *CMStatistics (ERCIM) 2018*, Pisa, Italy (14-16 Dec 2018)
- Scientific Committee, *2nd International Conference on Econometrics and Statistics*, Hong Kong (19-21 June 2018)
- Scientific Committee, *Statistics and Data Science: new Developments for Business and Industrial Applications*, Torino (24-25 May 2018)
- Organiser (joint with Antonio Canale), *2nd StaTalk on Bayesian Nonparametrics*, Moncalieri (Jan 2016)
- Organizing Committee, *3rd Carlo Alberto Stochastics Workshop*, Moncalieri (10-11 Jan 2014)
- Organizing Committee, *2nd Carlo Alberto Stochastics Workshop*, Moncalieri (23 Mar 2012)
- Organizing Committee, *1st Carlo Alberto Stochastics Workshop*, Moncalieri (10 June 2010)

- Local Organizing Committee, *7th Workshop on Bayesian Nonparametrics*, Moncalieri (21-25 June 2009)
- Local Organizing Committee, *Carlo Alberto Research Programme in Bayesian Nonparametrics*, Moncalieri (21 June - 5 July 2009)

#### *Session organization*

- “Advances in Bayesian Nonparametrics”, Member Invited Session at ISBA, Kunming, China (June 29-July 3, 2020)
- 3-session track “Bayesian semi- and non-parametric modelling” (joint with R. Argiento (Un. of Torino) and Li Ma (Duke Un.)), *CMStatistics (ERCIM) 2018*, Pisa, Italy (14-16 Dec 2018)
- “Bayesian nonparametrics”, *The Mathematics of Subjective Probability*, Milan, Italy (Sept 2018)
- “Recent advances in Bayesian methods”, *2nd International Conference on Econometrics and Statistics*, Hong Kong (19-21 June 2018)
- “Recent advances in Bayesian inference”, *IISA International Conference on Statistics*, Hyderabad, India (28-30 Dec 2017)
- 3-session track “Bayesian semi- and non-parametric modelling” (joint with R. Argiento (Un. of Torino) and Li Ma (Duke Un.)), *CMStatistics (ERCIM) 2017*, London, UK (16-18 Dec 2017)
- “Bayesian nonparametrics”, *First Italian Meeting on Probability and Mathematical Statistics*, Torino, Italy (19-22 June 2017)
- 3-session track “Bayesian semi- and non-parametric modelling” (joint with A. Lijoi (Un. of Pavia) and Li Ma (Duke Un.)), *CMStatistics (ERCIM) 2016*, Sevilla, Spain (9-11 Dec 2016)
- 3-session track “Bayesian semi- and non-parametric modelling” (joint with A. Lijoi (Un. of Pavia) and Li Ma (Duke Un.)), *CMStatistics (ERCIM) 2015*, London, UK (12-14 Dec 2015)
- 3-session track “Bayesian semi- and non-parametric modelling” (joint with A. Lijoi (Un. of Pavia) and Li Ma (Duke Un.)), 7th International Conference of the ERCIM WG on Computing and Methodological Statistics, Pisa, Italy (6-8 Dec 2014)
- “Stochastic processes for frequency models”, *XI Symposium of Probability and Stochastic Processes*, Guanajuato, Mexico (18-22 Nov 2013)

#### **Talks at conferences**

##### *Invited talks*

- 15th ISBA World Meeting, Kunming, China (June 2021)
- 39th International Symposium on Forecasting, Thessaloniki, Greece (June 2019)
- Population Dynamics And Statistical Physics In Synergy II, Pisa, Italy (Apr 2019)
- CMStatistics 2018, Pisa, Italy (Dec 2018)
- 14th ISBA World Meeting, Edinburgh, UK (June 2018)
- IISA International Conference on Statistics, Hyderabad, India (Dec 2017)

- Bayesian Nonparametric Inference: Dependence Structures and their Applications, Oaxaca, Mexico (Dec 2017)
- IMS-China International Conference on Statistics and Probability, Nanning, China (June 2017)
- 1st Italian Meeting on Probability and Mathematical Statistics, Torino, Italy (June 2017)
- Advances in Bayesian nonparametric statistics: A gathering with Stephen Walker, Mexico City (Nov 2014)
- 37th Conference on Stochastic Processes and their Applications, Buenos Aires, Argentina (July 2014)
- 12th ISBA World Meeting, Cancún, Mexico (July 2014)
- 7th International Workshop on Applied Probability, Antalya, Turkey (June 2014)
- Workshop on Random Measures and Measure-Valued Processes, Banff International Research Station, Canada (Sept 2013)
- 59th World Statistics Congress, Hong Kong, China (Aug 2013)
- 36th Conference on Stochastic Processes and their Applications, Boulder, CO, USA (July 2013)
- ISBA Regional Meeting & International Workshop/Conference on Bayesian Theory and Applications, Varanasi, India (Jan 2013)
- 5th ERCIM International Conference on Computing and Statistics, Oviedo, Spain (Dec 2012)
- The impact of statistical thinking in economics and life sciences, Milan, Italy (Sept 2012)
- 7th Conference on Statistical Computation and Complex Systems, Padova, Italy (Sept 2011)
- 8th Workshop on Bayesian Nonparametrics, Veracruz, Mexico (June 2011)
- 35th Conference on Stochastic Processes and their Applications, Oaxaca, México (June 2011)
- 3rd ERCIM International Conference on Computing and Statistics, London, UK (Dec 2010)
- Joint Statistical Meetings (discussant), Vancouver, Canada (Aug 2010)
- 5th International Workshop on Applied Probability, Colmenarejo, Spain (July 2010)
- 6th Conference on Statistical Computation and Complex Systems (discussant), Milan, Italy (Sept 2009)
- 6th Young European Probabilists Workshop, Eindhoven, Netherlands (Mar 2009)
- 15th European Young Statisticians Meeting, Castro Urdiales, Spain (Sept 2007)
- Construction and properties of Bayesian nonparametric regression models, Cambridge, UK (Aug 2007)

*Contributed talks and posters*

- The Mathematics of Subjective Probability, Milan, Italy (Sept 2018)
- 13th ISBA World Meeting, Santa Margherita di Pula, Italy (June 2016)
- 48th Meeting of the Italian Statistical Society, Salerno, Italy (June 2016)
- 38th Conference on Stochastic Processes and their Applications, Oxford, UK (July 2015)
- 9th Workshop on Bayesian Inference in Stochastic Processes, Istanbul, Turkey (June 2015)
- 10th Conference on Bayesian Nonparametrics, Raleigh, NC, USA (June 2015)

- 47th Meeting of the Italian Statistical Society, Cagliari, Italy (June 2014)
- 9th Conference on Bayesian Nonparametrics (poster), Amsterdam, Netherlands (June 2013)
- 8th Workshop on Bayesian Inference in Stochastic Processes (poster), Milano, Italy (June 2013)
- 46th Meeting of the Italian Statistical Society, Rome, Italy (June 2012)
- 19th Congress of the Italian Mathematical Union, Bologna, Italy (Sept 2011)
- 7th Workshop on Bayesian Inference in Stochastic Processes, Getafe, Spain (Sept 2011)
- 7th Workshop on Bayesian Nonparametrics (poster), Moncalieri, Italy (June 2009)
- 7th World Congress in Probability and Statistics, Singapore (July 2008)
- 5th Workshop on Bayesian Inference in Stochastic Processes, Valencia, Spain (June 2007)

## Seminars and visits

### *Invited seminars*

- Research Center for Statistics, Un. of Geneva, Switzerland (20 Oct 2017)
- Dept. of Statistics and Data Sciences, Un. of Texas at Austin, USA (14 Feb 2017)
- Dept. of Economics, Ca' Foscari Un. of Venice, Italy (26 Jan 2015)
- Inst. of Mathematics, Vietnam Academy of Science and Technology, Hanoi (7 Aug 2013)
- Dept. of Decision Sciences, Bocconi Un., Italy (22 Nov 2012)
- Dept. of Statistical Science, Duke Un., USA (5 Oct 2012)
- Dept. of Probability and Statistics, UNAM, México (13 Jan 2010)
- Dept. of Quantitative Methods, Un. of Navarra, Spain (18 Nov 2009)
- Dept. of Economics and Quantitative Methods, Un. of Pavia, Italy (1 Apr 2008)

### *Research visits*

- Dept. of Statistics, Un. of Oxford, UK (30 July-3 Aug 2017)
- Dept. of Statistics and Data Sciences, Un. of Texas at Austin, USA (10-17 Feb 2017)
- Dept. of Statistics, Un. of Oxford, UK (8-11 Dec 2015)
- Dept. of Statistics and Data Sciences, Un. of Texas at Austin, USA (3-11 Oct 2015)
- Dept. of Statistics and Data Sciences, Un. of Texas at Austin, USA (12-22 Nov 2014)
- Dept. of Probability and Statistics, IIMAS, UNAM, México (24-28 Nov 2014)
- Dept. of Statistics and Data Sciences, Un. of Texas at Austin, USA (30 Nov-5 Dec 2013)
- Dept. of Probability and Statistics, IIMAS, UNAM, México (23-28 Nov 2013)
- Dept. of Economics, Pompeu Fabra Un., Spain (28-31 Oct 2013)
- Dept. of Statistics, Un. of Oxford, UK (1-4 Oct 2013)
- Dept. of Economics, Pompeu Fabra Un., Spain (4-8 Dec 2012)
- Visiting fellow, Institute for Computational and Experimental Research in Mathematics, USA (27 Sept - 3 Nov 2012)
- Dept. of Economics, Pompeu Fabra Un., Spain (5-10 July 2012)

- Visiting fellow, Collegio Carlo Alberto (15 Sept - 14 Dec 2010)
- Dept. of Probability and Statistics, IIMAS, UNAM, México (7-16 Jan 2010)
- Dept. of Quantitative Methods, Un. of Navarra, Spain (16-22 Nov 2009)
- Visiting postdoctoral fellow, Institute of Mathematics, Statistics and Actuarial Science, Un. of Kent, UK (Feb-June 2007)
- Visiting PhD student, Institute of Mathematics, Statistics and Actuarial Science, Un. of Kent, UK (Sept 2005 - June 2006)

## Education-related activities

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### Direction of educational programs

- 2016-     Coordinator for Mathematics and Statistics, [Allievi Honors Program](#), Collegio Carlo Alberto
- 2015-     Deputy Coordinator and Chair of Admissions, [Laurea Magistrale \(M.Sc.\) in Stochastics and Data Science](#), University of Torino




### Funding

- 2019-21 Two-year grant (joint with Laura Sacerdote) for the project *Internationalization of the education in Data Science at the Un. of Torino*, funded by CRT Foundation.
- 2017-19 Two-year grant (joint with Laura Sacerdote) for the project *Consolidation of the M.Sc. in Stochastics and Data Science*, funded by CRT Foundation.
- 2015-17 Two-year grant (joint with Laura Sacerdote) for the project *Start-up of the M.Sc. in Stochastics and Data Science*, funded by CRT Foundation.




### Teaching

(Courses held at the Un. of Torino unless otherwise specified. Flags indicate teaching language)

*2017/18 - current*

- *Bayesian statistics* () , M.Sc. in Stochastics and Data Science
- *Stochastic modelling for statistical applications* () , M.Sc. in Stochastics and Data Science
- *Statistics* () , B.Sc. in Economics

*2016/17*

- *Bayesian nonparametric statistics* () , M.Sc. in Stochastics and Data Science
- *Stochastic modelling for statistical applications* () , M.Sc. in Stochastics and Data Science
- *Statistics* () , B.Sc. in Economics

*2015/16*



- *Stochastic modelling for statistical applications* (🇬🇧), M.Sc. in Stochastics and Data Science
- *Statistics* (🇮🇹), B.Sc. in Economics

2014/15

- *Statistics* (🇮🇹), B.Sc. in Economics

2013/14

- *Statistics* (🇮🇹), B.Sc. in Banking, Stock Exchange and Insurance

2012/13

- *Statistics* (🇮🇹), B.Sc. in Banking, Stock Exchange and Insurance
- *Measure Theory* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto

2011/12

- *Statistics* (🇮🇹), B.Sc. in Banking, Stock Exchange and Insurance
- *Measure Theory* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto

2010/11

- *Statistical Inference* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto
- *Measure Theory* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto
- *Stochastic processes* (🇮🇹), M.Sc. in Banking and Finance, Un. of Pavia
- *Data analysis* (🇮🇹), B.Sc. in Economics, Un. of Pavia

2009/10

- *Statistical Inference* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto
- *Measure Theory* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto
- *Stochastic processes* (🇮🇹), B.Sc. in Banking and Finance, Un. of Pavia
- *Data analysis* (🇮🇹), B.Sc. in Economics, Un. of Pavia

2008/09

- *Statistical Inference* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto
- *Measure Theory* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto

- *Data analysis* (🇮🇹), B.Sc. in Economics, Un. of Pavia

2007/08

- *Statistical Inference* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto
- *Measure Theory* (🇬🇧), Ph.D. in Theoretical Economics, Finance and Statistics, Un. of Torino, and Allievi Honors Program, Collegio Carlo Alberto

## Other local administrative duties

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Oct 2018-current: Member of the Executive Board, ESOMAS Dept., Un. of Torino  
 2019: Member of the Teaching Assistants Selection Committee, ESOMAS Dept., Un. of Torino  
 Oct 2015-Sept 2018: Member of the Research Committee, ESOMAS Department, Un. of Torino  
 Sept 2010-Sept 2017: Statistics Seminar Series coordinator, Collegio Carlo Alberto  
 Oct 2016: Visiting Scientists Committee, ESOMAS Department, Un. of Torino  
 Sept 2015: Member of the University Committee for Foreign Students Scholarships, Un. of Torino  
 Nov 2013-Sept 2015: Member of the Executive Board, School of Management and Economics, Un. of Torino  
 Feb 2012-Sept 2015: Member of the Executive Board, ESOMAS Department, Un. of Torino  
 Sept 2012: Member of the Committee for the Dept. Bylaw, ESOMAS Department, Un. of Torino  
 Apr 2010-Mar 2011: Department's website developer and administrator, Dept. of Economics and Quantitative Methods, Un. of Pavia  
 Mar 2008-Mar 2011: Statistics seminars coordinator, Dept. of Economics and Quantitative Methods, Un. of Pavia  
 Mar 2008-Sept 2008: Internships Committee Member, Faculty of Economics, Un. of Pavia

## Supervisions

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### Postdocs

- Augusto Fasano (Sep 2020 - ). Optimal filtering and smoothing.
- Guillaume Kon Kam King (Mar 2016 - Dec 2019). Nonparametric functional forecasting. Optimal filtering and smoothing.

## Selected graduate students

- Filippo Ascolani, M.Sc. in Stochastics and Data Science, Un. of Torino (2019). *Some distributional results for a class of posterior Fleming-Viot processes* Next position: PhD student, Bocconi University. **Runner-up (honorable mention) for 2019 best thesis in Mathematical Statistics, Italian Statistical Society.**
- Gabriele Lubatti, Senior Allievi Honors Program, Collegio Carlo Alberto (2019). *Stochastic analysis for modelling cell competition in mouse embryo*. Next position: PhD student, Helmholtz Zentrum München, Germany.
- Matteo Giordano, M.Sc. in Mathematics, Un. of Torino (2017). *Birth and death processes and Ewens partition structures*. Next position: PhD student, Un. of Cambridge, UK.
- Riccardo Fogliato, M.Sc. in Stochastics and Data Science, Un. of Torino (2017). *Filtering Wright-Fisher and CIR processes*. Next position: PhD student, Carnegie Mellon Un., USA. **Winner of the Silver Medal** awarded to the best student of the M.Sc. 2015 cohort.
- Matteo Sordello, M.Sc. in Mathematics, Un. of Torino (2015). *Diffusion approximation for cluster dynamics in a generalized gamma population model*. Next position: PhD student, Wharton School, Un. of Pennsylvania, USA.
- Gianluca Detommaso, M.Sc. in Mathematics, Un. of Torino (2015). *Scaling limits of some Poisson-Dirichlet-driven Moran models*. Next position: PhD student, Un. of Bath, UK.
- Vito Musci, Senior Allievi Honors Program, Collegio Carlo Alberto (2014). *Optimal filtering of one dimensional diffusive signals*. Next position: MBA Fellow at Collège des Ingénieurs, Paris, France.

## Publications

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### Articles in refereed journals

- 1) ASCOLANI, F., LIJOI, A. and RUGGIERO, M. (2020)  
Predictive inference with Fleming-Viot-driven dependent Dirichlet processes  
*Bayesian Analysis*, in press.
- 2) GIORDANO, M., DE BLASI, P. and RUGGIERO, M. (2020)  
A reversible allelic partition process and Pitman sampling formula  
*ALEA - Latin American Journal of Probability and Mathematical Statistics*, in press.
- 3) KON KAM KING, G., CANALE, A. and RUGGIERO, M. (2019)  
Bayesian functional forecasting with locally-autoregressive dependent processes  
*Bayesian Analysis* **14**, 1121-1141.
- 4) ARGIENTO, R. and RUGGIERO, M. (2018)  
Computational challenges and temporal dependence in Bayesian nonparametric models  
*Statistical Methods & Applications* **27**, 231-238.

- 5) RUGGIERO, M. and SORDELLO, M. (2018)  
Clustering dynamics in a class of normalised generalised gamma dependent priors  
*Annals of the Institute of Statistical Mathematics* **70**, 83–98.
- 6) COSTANTINI, C., DE BLASI, P., ETHIER, S.N., RUGGIERO, M. and SPANÒ, D. (2017)  
Wright–Fisher construction of the two-parameter Poisson–Dirichlet diffusion  
*The Annals of Applied Probability* **27**, 1923–1950.
- 7) PAPASPILIOPOULOS, O., RUGGIERO, M. and SPANÒ, D. (2016)  
Conjugacy properties of time-evolving Dirichlet and gamma random measures  
*Electronic Journal of Statistics* **10**, 3452–3489.
- 8) CANALE, A. and RUGGIERO, M. (2016)  
Bayesian nonparametric forecasting of monotonic functional time series.  
*Electronic Journal of Statistics* **10**, 3265–3286.
- 9) MENA, R.H. and RUGGIERO, M. (2016)  
Dynamic density estimation with diffusive Dirichlet mixtures  
*Bernoulli* **22**, 901–926.
- 10) GUTIERREZ, L., MENA, R.H. and RUGGIERO, M. (2016)  
A time dependent Bayesian nonparametric model for air quality analysis  
*Computational Statistics and Data Analysis* **95**, 161–175.
- 11) DE BLASI, P., FAVARO, S., LIJOI, A., MENA, R., PRÜNSTER, I. and RUGGIERO, M. (2015)  
Are Gibbs-type priors the most natural generalization of the Dirichlet process?  
*IEEE Transactions on Pattern Analysis and Machine Intelligence* **37**, 212–229.
- 12) PAPASPILIOPOULOS, O. and RUGGIERO, M. (2014)  
Optimal filtering and the dual process  
*Bernoulli* **20**, 1999–2019.
- 13) RUGGIERO, M. (2014)  
Species dynamics in the two-parameter Poisson-Dirichlet diffusion model  
*Journal of Applied Probability* **51**, 174–190.
- 14) RUGGIERO, M., WALKER, S.G. and FAVARO, S. (2013)  
Alpha-diversity processes and normalized inverse-Gaussian diffusions  
*The Annals of Applied Probability* **23**, 386–425.
- 15) PRÜNSTER, I. and RUGGIERO, M. (2013)  
A Bayesian nonparametric approach to modeling market share dynamics  
*Bernoulli* **19**, 64–92.
- 16) MENA, R.H., RUGGIERO, M. and WALKER, S.G. (2011)  
Geometric stick-breaking processes for continuous-time Bayesian nonparametric modeling  
*Journal of Statistical Planning and Inference* **141**, 3217–3230.
- 17) MARTINELLI, A., RUGGIERO, M. and WALKER, S.G. (2010)  
A note on convergence rates for posterior distributions via large deviations techniques

*Statistical Papers* **51**, 337–347.

- 18) FAVARO, S., RUGGIERO, M. and WALKER, S.G. (2009)  
On a Gibbs sampler based random processes in Bayesian nonparametrics  
*Electronic Journal of Statistics* **3**, 1556–1566.
- 19) RUGGIERO, M. and WALKER, S.G. (2009)  
Countable representation of infinite-dimensional diffusions derived from the two-parameter Poisson-Dirichlet process  
*Electronic Communications in Probability* **14**, 501–517.
- 20) RUGGIERO, M. and WALKER, S.G. (2009)  
Bayesian nonparametric construction of the Fleming-Viot process with fertility selection  
*Statistica Sinica* **19**, 707–720.

#### Articles in conference proceedings

- 21) KON KAM KING, G., PAPASPILIOPOULOS, O. and RUGGIERO, M. (2018)  
Bayesian inference for hidden Markov models using duality and approximate filtering distributions  
*Proceedings of the 49th Meeting of the Italian Statistical Society*
- 22) LIJOI, A., RUGGIERO, M. and SPANÒ, D. (2016)  
On the transition function of some time-dependent Dirichlet and gamma processes  
*JSM Proceedings, Section on Nonparametric Statistics. Alexandria, VA: American Statistical Association*
- 23) CAMERLENGHI, F., PRUENSTER, I. and RUGGIERO, M. (2016)  
On time-dependent Gibbs-type random probability measures  
*JSM Proceedings, Section on Nonparametric Statistics. Alexandria, VA: American Statistical Association*
- 24) GUTIERREZ, L., MENA, R.H., and RUGGIERO, M. (2016)  
On GEM diffusive mixtures  
*JSM Proceedings, Section on Nonparametric Statistics. Alexandria, VA: American Statistical Association*
- 25) DE BLASI, P., RUGGIERO, M. and WALKER, S.G. (2016)  
Modelling stationary varying-size populations via Polya sampling  
*Proceedings of the 48th Meeting of the Italian Statistical Society*
- 26) PAPASPILIOPOULOS, O., RUGGIERO, M. and SPANÒ, D. (2014)  
Bayesian inference for dynamically evolving distributions.  
*Proceedings of the 47th Meeting of the Italian Statistical Society*
- 27) RUGGIERO, M. (2012)  
On the role of normalized inverse-Gaussian priors in continuous-time models.  
*Proceedings of the 46th Meeting of the Italian Statistical Society*

- 28) RUGGIERO, M. (2011)  
On a prediction problem for an infinite dimensional hidden Markov model.  
*Proceedings of the S.Co. 2011 Conference*
- 29) RUGGIERO, M. (2007)  
Bayesian nonparametric construction of Fleming-Viot models in population genetics.  
*Proceedings of the 15th European Young Statisticians Meeting*