# Roberto Casarin

## PERSONAL INFORMATION

Born in Treviso (Italy)
Date 5th March 1975
Nationality Italian
Languages Italian, English, German, French
Status Married, two children

## EDUCATION

| | |
|---|---|
| 2004-2007 | Ph.D. in Mathematics, University Paris IX Dauphine, France |
| 2000-2003 | Ph.D. in Economics, University Ca' Foscari of Venice, Italy |
| 2001-2002 | M.Sc. in Applied Mathematics, University Paris IX Dauphine, France |
| 1994-1998 | Laurea in Economics, University Ca' Foscari of Venice |

## FURTHER EDUCATION

| | |
|---|---|
| 2009 | Summer School in Probability Theory, University of Tampere, Finland |
| 2002 | Summer School in Mathematics, University of Marseille, France |
| 2000 | Summer School in Mathematics (SMI), University of Perugia, Italy |

## CURRENT POSITION

| | |
|---|---|
| 2019- | Full Professor of Econometrics, University Ca' Foscari of Venice (**UCF**, in what follow) |
| 2018- | Director of the Venice center for Economics and Risk Analytics (VERA), Center of Excellence, UCF |
| 2018- | Research Associate at the European Centre for Living Technology (ECLT) |
| 2016- | Director of the International Master in Economics and Finance (IMEF), UCF |
| 2015- | Research Associate at Research Institute for Complexity, UCF |
| 2001- | Research Associate and Member of the Scientific Committee, GRETA |

## PAST POSITIONS

| | |
|---|---|
| 2015-2019 | Associate Professor of Econometrics, University Ca' Foscari of Venice |
| 2010-2015 | Assistant Professor (Econometrics, SECS-P/05-13/A5), UCF |
| 2006-2010 | Assistant Professor (Econometrics, SECS-P/05), University of Brescia |
| 2003-2007 | Research Assistant (Applied Mathematics), CEREMADE, CNRS-Paris IX Dauphine, France |
| 2005-2006 | Research Assistant, University of Brescia |
| 2005-2005 | Research Assistant, University of Padova |
| 1999-2000 | Research Assistant, GRETA, Venice |

## TEACHING

### PHD

| | |
|---|---|
| 2019-2021 | Advanced Econometrics (30h), PhD in Economics, UCF. |
| 2015-2021 | Econometrics (30h), PhD in Economics, UCF. |
| 2014-2015 | Bayesian Statistics and Econometrics (15h), PhD in Economics, UCF. |
| 2012-2021 | Bayesian Econometrics (20h), CIdE PhD Summer School, Bertinoro/Perugia |
| 2013 | Bayesian Stochastic Volatility Models (6h), PhD in Statistics, University Roma Tre |
| 2008 | Statistics for Linguistic, PhD in Linguistic (15h), UCF |

### MSC

| | |
|---|---|
| 2015-2019 | Networks in Social Sciences and Economics (30h), DAIS, UCF |
| 2012-2021 | Nonlinear Models and Financial Econometrics (30h), QEM, UCF |
| 2010-2021 | Risk process and Insurance (6h), IMEF, UCF |
| 2010-2021 | Numerical Methods for Option Pricing (6h), IMEF, UCF |
| 2015-2016 | Risk Measurement (30h), UCF |
| 2013-2015 | Applied Econometrics (30h), UCF |
| 2012-2014 | Econometrics (35h), QEM, UCF |
| 2004-2006 | Stochastic Calculus (6h), IMEF, UCF |

### UNDERGRADUATE

| | |
|---|---|
| 2015-2020 | Introduction to Econometrics (30h), UCF |
| 2008-2010 | Applied Econometrics II (30h), Università di Brescia |
| 2008-2010 | Applied Econometrics I (30h), Università di Brescia |
| 2009-2009 | Financial Econometrics (30h), Università di Brescia |

2009 Financial Econometrics (30h), Università di Brescia
2005-2009 Finance of Insurance and Social Security (30h), Università di Brescia
2007-2009 Currency Risk and Capital Markets (30h), Università di Brescia
2007 Numerical Methods in Econometrics and Finance (20h), Università di Brescia
2006-2008 Forecasting Methods I (30h), UCF

### OTHER

2001 Performance Evaluation and Attribution, Arthur Andersen, Milano
2001-2002 Stochastic Process Simulation Methods, Arthur Andersen, Milano
2000 Monte Carlo Simulation Methods, Arthur Andersen, Milano
2000 Portfolio Theory and Asset Allocation, Arthur Andersen, Milano

## RESEARCH ACTIVITIES

### CONFERENCE ORGANIZATION

2018 Workshop on Advances in Bayesian Modelling, Venice, July 2018.
2017 First Italian-French Statistics Seminar (Scientific and Organizing Committees), Venice, June 2017.
2016 European Seminars of Bayesian Econometrics ESOBE meeting, October 2016, Venice (Scientific and Organizing Committees).
2016 ICEEE Meeting (Scientific Committee).
2016 CFE Meeting (Scientific Committee).
2011-2018 Bayesian Nonlinear Econometrics session, CSDA-CFE meeting.
2015 2nd Days of Econometrics for Finance International Conference (JEF'2015), Mohammed V University, Rabat, Morocco, 18 - 19 December 2015.
2013 Workshop on New Tools in Macro-Econometrics, UCF
2011 Workshop on Probability Models in Econometrics, UCF
2011 Workshop on Density Forecasting, UCF
2009 PhD Students Workshop Financial Econometrics and Quantitative Finance, Università di Brescia
2008 Third Japanese-European Bayesian Econometrics and Statistics Meeting, Università di Brescia
2007 Worskshop on Non-linear Models for Business Cycle Analysis, Ecole Normal Superior-Cachan, Parigi

### JOURNAL EDITORIAL BOARD

2019- Bayesian Analysis (Associate Editor)
2018- Econometrics (Associate Editor)
2015 Econometrics (Guest Editor) Special Issue "Computational Complexity in Bayesian Analysis"

### REFEREEING JOURNALS

Journal of the American Statistical Association, Journal of Business and Economic Statistics, Journal of Econometrics, Annals of Applied Statistics, Journal of Applied Econometrics, Journal of Statistical Planning and Inference, Signal Processing Letters, Journal of Economics Dynamics and Control, The European Journal of Finance, Research in Economics, Computational Statistics and Data Analysis, Journal of Forecasting, Journal of Banking and Finance

### REFEREEING PROCEEDINGS

2010-2014 International Conference on Artificial Intelligence and Statistics, AISTAT
2014 Neural Information Processing Systems, NIPS

### REFEREEING GRANT PROJECTS

2008-2009 Social Sciences and Humanities Research Council (SSHRC) of Canada, for the Standard Research Grants Competition

### VISITING

2008-2009 Department of Mathematics, University of Bristol
2009 Department of Math., University Paris Sud
2002-2003 CEREMADE, Department of Mathematics University Paris Dauphine

### PHD STUDENT SUPERVISION

2013-2014 Anthony Osuntuyi, "*Bayesian Markov-switching GARCH*",
PhD Competed in January 2014 (co-supervised with Monica Billio).
Current Position: Lecturer, Dep. of Mathematics, Ile-Ife University, Nigeria.
2012-2015 Daniel Felix Ahelegbey, "*Bayesian Graphical Models*",
PhD Competed in June 2015 (co-supervised with Monica Billio).
Current Position: Lecturer, University of Pavia.
2013-2016 Komla Mawulom Agudze, "*Panel Markov-Switching Models*",
PhD Competed in June 2016 (co-supervised with Monica Billio).
Current Position: World Bank, Washington.
2014-2017 Luca Rossini, "*Bayesian nonparametric models*",
PhD Competed in February 2017 (co-supervised with Monica Billio).

| | |
|---|---|
| | Current Position: Lecturer, Dep. of Mathematics, Queen Mary University of London. |
| 2014-2017 | Silvia del Rio, "*Uncertainty and macroeconomic models*",<br>PhD Competed in June 2017 (co-supervised with Giovanni Caggiano). |
| 2015-2018 | Giovanna Notarnicola, "*Microeconometrics and Uncertainty*",<br>PhD Competed in July 2018 (co-supervised with Agar Brugiavini).<br>Current Position: Data scientist, AVIS, London. |
| 2015-2018 | Matteo Iacopini, "*Tensor calculus in econometrics*",<br>PhD Competed in July 2018 (co-supervised with Monica Billio e Dominique Guegan).<br>Current Position: Marie-Curie Fellow, University of Amsterdam. |
| 2018-2022 | Giulia Carallo, "*Generalized Poisson Processes*",<br>Expected completion year 2022 (co-supervised with Monica Billio). |
| 2020-2024 | Ovielt Baltodano, "*Stochastic Block Models*",<br>Expected completion year 2024 (co-supervised with Pietro Dindo). |
| 2021-2025 | Andrea Trovato, "Markov switching models and portfolio volatility protection"<br>Expected completion year 2025 (co-supervised with Monica Billio). |
| 2021-2025 | Giovanni Pianon, "ESG econometric modelling"<br>Expected completion year 2025 (co-supervised with Monica Billio). |
| 2021-2025 | Antonio Peruzzi, "Social network econometric modelling"<br>Expected completion year 2025 (co-supervised with Monica Billio). |

## PHD COMMITTEE

| | |
|---|---|
| 2019 | Fabio Franco, PhD in Econometrics, University Roma Tor Vergata. |
| 2018 | Francesco Corsello, PhD in Economics, Bocconi University. |
| 2018 | Valerio Nispi, PhD in Economics, Bocconi University. |
| 2018 | Jacopo Stacciolo, PhD in Economics, Scuola Superiore Sant'Anna, Pisa. |
| 2018 | Carlo Santagiustina, PhD in Economics, Ca' Foscari University of Venice. |
| 2016 | Hajar Nasrazadani, PhD in Statistics, Universitad Politecnica de Catalunya. |
| 2015 | Audrone Virbikaite, PhD in Economics and Quantitative Methods, University Carlos III of Madrid |
| 2014 | Andrea Pierini, PhD in Economics and Quantitative Methods, University Roma Tre |

## SCIENTIFIC MEMBERSHIPS

| | |
|---|---|
| 2019- | European Seminar of Bayesian Econometrics (ESOBE, Board member) |
| 2011-2018 | Italian Statistics Society (SIS) |
| 2013-2016 | Italian Econometric Society (SIdE) |
| 2015-2019 | International Society for Bayesian Analysis (ISBA) |
| 2013-2016 | Euro Area Business Cycle Network (EABCN) |
| 2016-2016 | European Network for Business and Industrial Statistics (ENBIS) |

## RESEARCH AND GRANTS PROJECTS

| | |
|---|---|
| 2018-2019 | Grant "EeDaPP Energy efficiency Data Protocol and Portal", H2020 g.a. No 784979 (researcher) |
| 2017-2018 | Grant "EeMAP Energy efficient Mortgages Action Plan", H2020 g.a. No 746205(researcher) |
| 2018 | Grant Visiting Professor by the Università Italo Francese 2017. |
| 2017 | Grant Workshop organization by Università Italo Francese 2017. |
| 2016-2017 | Project "Methodological support financial cycles", EUROSTAT, Tender No ESTAT/B/2013/001, 2013/S 101-172114<br>Lot 1: Methodological support (principal investigator, and joint supervision with M. Billio) |
| 2016-2016 | Project "Using text mining methods on newspapers and social networks to construct sentiment indicators",<br>EUROSTAT, Tender No ESTAT/C/2013/010 (principal investigator and supervisor) |
| 2014-2016 | Grant "Systemic Risk", Institut Europlace de Finance, (researcher) |
| 2013-2016 | Grant "SYRTO-SYstemic Risk TOmography: Signals, Measurements, Transmission Channels, and Policy<br>Interventions", (researcher) |
| 2012-2013 | Grant, "Modelli statistici multivariati per la valutazione dei rischi", Italian National Research Council (PRIN),<br>(researcher) |
| 2012-2013 | Post-doc grant, "Bayesian Forecasting Methods in Macroeconomics" University Ca' Foscari, (supervisor) |
| 2010-2011 | Grant "Advanced statistical and econometric techniques for PEEIS Transmission of shocks and cyclical fluctuations<br>in the Euro Area, member states and main economic partners", EUROSTAT, (principal investigator and supervisor) |
| 2011 | Post-doc grant, "Markov-switching GARCH models", University of Brescia, (supervisor) |
| 2009 | Research fellowship, "State Matrix Kalman Filtering", GRETA, (supervisor) |
| 2005 | Grant, Italian National Research Council (PRIN), "Contagion and interdependence between financial markets"<br>(researcher) |

## SEMINARS AND MEETING PRESENTATIONS

*A Bayesian Compositional Model for Large Density Combination in Finance*

| | |
|---|---|
| Dec 2020 | EC^2 Meeting on High dimensional modeling in time series, Paris (remote conference) |

*A Bayesian Generalized Poisson Model for Cyber Risk Analysis*

| | |
|---|---|
| Sep 2020 | Mathematical and Statistical Methods for Actuarial Sciences and Finance, Venice (remote conference) |
| Dec 2020 | EC^2 Meeting on High dimensional modeling in time series, Paris (remote conference) |

| | |
|---|---|
| | *A Bayesian Approach for Inference on Probabilistic Surveys* |
| Jun 2019 | Bayesian Nonparametrics Meeting, Oxford (invited) |
| | *Bayesian Dynamic Tensor Regression* |
| Dec 2020 | Learning Tools and Applied Quantitative Methods for Decision Making, Bozen (invited) |
| Sep 2020 | Complexity Meets Finance Meeting, Remote Conference, Rome (invited) |
| Dec 2018 | CSDA-CFE Meeting, Pisa |
| Oct 2018 | High Dimensional Small Data Workshop, ECLT-University Ca' Foscari, Venice |
| Sep 2018 | UMI-SIMAI-PTM Joint Meeting, University of Wroclaw, Wroclaw |
| Apr 2018 | MAF, University of Madrid Carlos III, Madrid |
| | *Bayesian Markov switching tensor regression for time-varying networks* |
| Jun 2018 | Annual Meeting of the Statistical Society of Canada, Montreal (invited) |
| Jun 2018 | 12th Annual RCEA Bayesian Workshop, Rimini |
| Dec 2017 | CSDA-CFE Meeting, London |
| | *Smile at errors: A discrete-time stochastic volatility framework for pricing options with realized measures* |
| Set 2016 | Free University of Bozen, Bozen (invited) |
| | *Modeling Contagion and Systemic Risk* |
| Mar 2017 | Higher School of Economics, Moscow (invited) |
| Jun 2016 | CORE, UCL, Louvain-la-Neuve (invited) |
| Jul 2015 | IFCS Meeting, Bologna |
| May | 2015 Workshop on High-Dimensional Time Series, IAS, Wien |
| Mar 2015 | SNDE Meeting, BI Norwegian Business School, Oslo |
| | *Bayesian Nonparametric Sparse VAR Model* |
| May 2017 | Big Data in Dynamic Predictive Econometric Modeling, University of Pennsylvania |
| Jun 2016 | SIS Meeting, Florence |
| | *Markov Switching GARCH models for Bayesian Hedging on Energy Futures Market* |
| Aug 2016 | ESEM Meeting, Geneve |
| | *Dynamic Model Averaging for Quantile Regression* |
| Jun 2016 | Scientific Meeting of the Italian Statistical Society, Salerno |
| May 2014 | University of Glasgow, Glasgow (invited) |
| | *A Bayesian Approach for Inference on Probabilistic Surveys* |
| Oct 2016 | ESOBE Meeting, Venice |
| | *Growth-cycle phases in China's provinces: A Bayesian panel Markov-switching approach* |
| May 2016 | 7th Rimini Bayesian Econometrics Workshop, Rimini |
| | *A Bayesian Time-varying Approach to Risk Neutral Density Estimation* |
| Dec 2015 | CSDA-CFE Meeting, London |
| | *Multi-country Panel Markov-switching Unrestricted MIDAS* |
| Dec 2015 | CSDA-CFE Meeting, London |
| | *Parallel computing and stochastic simulation with MATLAB* |
| Jul 2015 | Department of Environmental Sciences, Informatics and Statistics, Venice (invited) |
| | *Bayesian nonparametric combination and calibration of predictive distributions* |
| Nov 2015 | University Cattolica del Sacro Cuore, Milan (invited) |
| Apr 2015 | European Center for Living Techonologies, Venice (invited) |
| Feb 2015 | Universidad Carlos III de Madrid, Madrid (invited) |
| | *Bayesian nonparametric combination and calibration* |
| Mar 2014 | CORE Universite Catolique de Louvain, (invited) |
| Jan 2014 | Wien University, Dep. Math., (invited) |
| | *Parallel Sequential Monte Carlo for Efficient Density Combination* |
| Jun 2013 | 7th Rimini Bayesian Econometrics Workshop |
| | *A Bayesian Markov-switching Stochastic Correlation Model* |
| Jun 2013 | SIS meeting on Advances in Latent Variables, Brescia |
| Aug 2013 | ESOBE Meeting, Oslo (poster) |
| | *A Bayesian panel Markov-switching VAR model* |
| Aug 2013 | ESOBE Meeting, Oslo (poster) |
| | *Beta Product dependent Pitman-Yor Processes for Bayesian Inference* |
| Feb 2014 | IMS-ISBA Meeting MCMSki, Chamonix |
| Dec 2013 | CSDA-CFE Meeting, London |
| | *Beta Product Poisson-Dirichlet Processes* |
| Dec 2012 | CSDA-CFE Meeting, Oviedo |
| Nov 2011 | Department of Statistics, University of Trieste (invited) |

*Slice Sampling Vectors of Beta Product Poisson-Dirichlet Processes*
Jun 2011 ISBA Meeting on Bayesian Learning, Yetepee University, Istanbul
*A Bayesian Approach to Forecasting Value-at-Risk of VIX Futures*
Jun 2011 International Conference on Risk Modeling and Management , Madrid
*Combining Turning Point Forecasts*
Jun 2011 31st International Symposium of Forecasting, Prague
*Interacting Multiple-Try Algorithm*
Mar 2011 Dep. of Statistics, University of Pavia (invited)
Jun 2011 Dep. of Statistics, University of Madrid III (invited)
Jun 2011 ASMDA Meeting, University La Sapienza, Rome
*Bayesian Model Selection for Beta Autoregressive Processes*
Jun 2011 ISBA Meeting on Bayesian Learning, Yetepee University, Istanbul
May 2011 Dep. of Statistics, University of Bologna (invited)
Nov 2010 Norges Bank, Oslo, (invited)
*Combining Predictive Densities using Bayesian Filtering*
Jul 2011 NBER Summer Institute, Boston
Jan 2011 4th ICEEE meeting, Pisa
Nov 2010 The European Seminar on Bayesian Econometrics, Rotterdam
Dec 2010 4th CSDA CFE Meeting, London
Oct 2010 6th Eurostat Colloquium, Luxembourg
*Markov-switching Stochastic-Correlation Models*
Jun 2011 International Conference on Risk Modeling and Management, Madrid
*Discussion on: Forecast Accuracy and Economic Gains from Bayesian Model Averaging using Time Varying Weights (by Hoogerheide, L. and Kleijn, R. and Ravazzolo, F. and Van Dijk, H.K. and Verbeek, M.)*
Jan 2010 2nd Meeting in memory of Carlo Giannini, Bank of Italy
*Sequential Monte Carlo for complex sampling problems*
Mar 2009 EPSRC Symposium Workshop on MCMC, Mathematics Institute, Warwick
*Matrix-State Particle Filter for Wishart Stochastic Volatility*
Jan 2009 3rd ICEEE meeting, Italy
*Discussion on: Approximate Bayesian inference for latent Gaussian models by using integrated nested Laplace approximations by H. Rue, S. Martino, and N. Chopin*
Oct 2008 Royal Statistical Society, Ordinary Meeting, London
*Self-avoiding Sequential Monte Carlo Samplers*
Jun 2008 Computational Economics Meeting, Paris
Jan 2008 Adap'ski 2008, a satellite meeting to MCMC'ski Bormio, Italy
*Identifying Business Cycle Turning Points with Sequential Monte Carlo Methods*
Sep 2008 5th Colloquium on Modern Tools for Business Cycle Analysis, LU
Jun 2008 Workshop on Emerging Methods in Bayesian Econometrics, Rotterdam (invited)
Jun 2008 First Workshop of the ERCIM Working Group on Comp.& Stat., Neuchatel Switzerland
Jun 2006 26th International Symposium on Forecasting, Santander Spain
*Matrix-State Particle Filter for Wishart Stochastic Volatility*
Nov 2007 University of Bolzano (invited)
Jun 2007 Convegno intermedio annuale SIS, "Rischio e Previsione", Venezia
*Sequential Monte Carlo and Stochastic Volatility Models*
Jun 2007 CSDA-CFE Meeting, Limassol, Cyprus
Feb 2006 MMF Seminars, University of Brescia, Italy
*Inference on Diffusion Processes by Population Monte Carlo method*
Apr 2005 Group de Travaille en Finance-Stat, CREST-INSEE, Paris
Jan 2005 MCMC'Ski Meeting, Bormio, Italy
Sep 2005 Young Stastistician Meeting, University Trinity College, Dublin
Sep 2005 Premieres recontres des jeunes statisticiens Aussois
May 2005 European Working Group on Financial Modeling, University of Brescia
*Bayesian Inference for Stochastic Volatility Models*
May 2004 Forecasting Financial Markets, Paris
*Bayesian inference in dynamic models with latent factors*
Jun 2004 ISBA Meeting, Valparaiso, Chile
Oct 2003 Colloquium on modern tools for business cycle analysis, Luxembourg (invited)
*Bayesian Inference for Generalised Markov Switching Stochastic Volatility Models*
Jun 2003 Workshop on Objective Bayesian Methodology, CNRS, Aussois
*Bayesian Inference for Mixture of Stable Distributions*

Apr 2003 Young Statistician Meeting, Cambridge

*Extreme returns in a shortfall risk framework*

May 2002 Forecasting Financial Markets, London

*Italian Equity Funds: Efficiency and Performance Persistence*

Jun 2001 European Financial Management Association (EFMA), Lugano

*Investment Styles in the European Equity Market*

May 1999 Forecasting Financial Markets, London

### TEACHING AND RESEARCH AT INTERNATIONAL INSTITUTIONS

Jun 2016 Advanced Time Series Analysis, EUROSTAT, Luxemburg

Aug 2013 Sequential Monte Carlo methods, Norges Bank, Oslo, Norway

Apr 2007 Inference on Business Cycle and Stock Market Volatility: A Particle Filter Approach CREST, Option Formation par la Recherche Course, Paris

### FELLOWSHIPS AND AWARD

2004 Società Italiana di Economia (SIE) prize for the best PhD thesis is Econometrics 2004

2000-2003 UCF, Italia: Borsa di Dottorato

### FUND RASING

2018 Grant Visiting Professor dell'Università Italo Francese 2017.

2017 Grant Workshop organization dell'Università Italo Francese 2017.

2016-2016 Grant “Financial Cycles”, EUROSTAT, (principal investigator and supervisor)

2016-2016 Grant “Text Mining”, EUROSTAT, (principal investigator)

2013-2016 Grant “SYRTO-SYstemic Risk TOmography: Signals, Measurements, Transmission Channels, and Policy Interventions”, (researcher)

2012-2013 Grant, “Modelli statistici multivariati per la valutazione dei rischi”, Italian National Research Council (PRIN), (researcher)

2010-2011 Grant “Advanced statistical and econometric techniques for PEEIS Transmission of shocks and cyclical fluctuations in the Euro Area, member states and main economic partners”, EUROSTAT Eurostat’s Invitation to Tender No 2009/S 107-153951, (principal investigator and supervisor)

### ACADEMIC DUTIES

2018-2022 Director of the Venice center for Economics and Risk Analytics (VERA), Center of Excellence

2016-2022 Director of the International Master in Economics and Finance (IMEF), UCF

2017-2022 Coordinator of the Department Erasmus Committee, Department of Economics, UCF

2015- 2022 Computer Cluster Management Committee (SCSCF), UCF

2017- 2022 University Infrastructure Committee (CSA), UCF

2017- 2019 Department Student-Professor Joint Committee, Department of Economics, UCF

2012-2019 PhD Faculty and Board, Department of Economics, UCF

2014-2019 Research Assessment Committee, Department of Economics, UCF

2014-2017 Seminar Organizing Committee, Department of Economics, UCF

2012-2017 Faini’s and Cazzavillan’s prize committee, Department of Economics, UCF

2007-2010 Elective member, Faculty of Economics, University of Brescia

## PUBBLICATIONS

### JOURNAL ARTICLES

[1] Agudze, K. M., Billio, M., Casarin, R., Ravazzolo, F. (2021). Markov Switching Panel with Network Interaction Effects, **Journal of Econometrics**, forthcoming.

[2] Billio, M., Casarin, R., Costola, M., Iacopini, M. (2021). A matrix-variate t model for networks, **Frontiers in Artificial Intelligence**, section Artificial Intelligence in Finance, forthcoming.

[3] Bassetti, F., Casarin, R., Rossini, L. (2020). Hierarchical Species Sampling Models, **Bayesian Analysis**, 15(3), 809-838.

[4] Bormetti, G., Casarin, R., Corsi, F. and Livieri, G. (2020). A stochastic volatility model with realized measures for option pricing, **Journal of Business and Economic Statistics**, 38(4), 856-871.

[5] Casarin, R., Camargo, J.E., Molina, G., Ter Horst, E. (2020). A framework for information synthesis into sentiment indicators using text mining methods, **Communications in Statistics (Theory and Methods)**, forthcoming.

[6] Casarin, R., Corradin, F., Ravazzolo, F. and Sartore, D. (2020). A scoring rule for factor and autoregressive models under misspecification, **Advances in Decision Sciences**, 24(2), 1-37.

[7] Casarin, R., Iacopini, M., German, M., Ter Horst, E., Espinasa, R., Sucre, C. and Rigobon, R. (2020). Multilayer network analysis of oil linkages, **Econometrics Journal**, 23(2), 269–296.

[8] Casarin, R., Correa, J. C., Camargo, J. E., Dakduk, S., German, M. and Ter Horst, E. (2019). What makes a tweet be retweeted? A Bayesian Trigram Analysis of Tweet Propagation during the 2015 Colombian Political Campaign, **Journal of Information Science**, forthcoming.

[9] Billio, M., Casarin, R., Rossini, L. (2019). Bayesian Nonparametric Sparse VAR Models, **Journal of Econometrics**, 212(1), 97-115.

[10] Bianchi, D., Billio, M., Casarin, R., Guidolin, M. (2019). Modeling Systemic Risk with Markov Switching Graphical SUR Models, **Journal of Econometrics**, 210(1),97-115.

[11] Billio, M., Casarin, R., Costola, M., Frattarolo, L. (2019). Opinion Dynamics and Disagreements on Financial Networks, **Advances in Decision Sciences**, 23(4), 1-27.

[12] Casarin, R., Michele, C. (2019). Structural changes in large economic datasets: A nonparametric homogeneity test, **Economics Letters**, 176, 55-59.

[13] Casarin, R., Molina, G., Ter Horst, E. (2019). A Bayesian Time-Varying Approach to Risk Neutral Density Estimation, **Journal of the Royal Statistical Society, Series A**, 182(1),165-195.

[14] Bassetti, F., Casarin, R., Ravazzolo, F. (2018). Bayesian Nonparametric Calibration and Combination of Predictive Distributions, **Journal of the American Statistical Association**, 113(522), 675-685.

[15] Casarin, R., Foroni, C., Marcellino, M., Ravazzolo, F. (2018). Economic Uncertainty Through the Lenses of a Mixed-Frequency Bayesian Panel Markov Switching Model, **Annals of Applied Statistics**, 12(4), 2559-2586.

[16] Casarin, R., Sartore, D. and Tronzano, M. (2018). A Bayesian Markov-switching correlation model for contagion analysis on exchange rate markets, **Journal of Business and Economic Statistics**, 36(1), 101-114.

[17] Martino, L., Casarin, R., Leisen, F., Luengo, D. (2018). Adaptive Independent Sticky MCMC algorithms, **EURASIP Journal on Advances in Signal Processing**, 5, 1-28.

[18] Racca, P., Casarin, R., Dondio, P., Squazzoni, F. (2018). Relating group size and posting activity of an online community of financial investors: regularities and seasonal patterns, **Physica A: Statistical Mechanics and its Applications**, 493, 458-466.

[19] Billio, M., Casarin, R., Osuntuy A. (2018). Markov Switching GARCH models for Bayesian Hedging on Energy Futures Markets, **Energy Economics**, 70, 545-562.

[20] Billio, M., Casarin, R., Ravazzolo, F. and van Dijk, H.K. (2016). Interconnections between Eurozone and US booms and busts using a Bayesian Panel Markov-Switching VAR model, **Journal of Applied Econometrics**, 31(7), 1352-1370.

[21] Ahelegbey D. F., Billio, M., Casarin, R. (2016). Bayesian Graphical Models for Structural Vector Autoregressive Processes, **Journal of Applied Econometrics**, 31(2), 357-386.

[22] Racca, P., Casarin, R., Dondio, P. and Squazzoni, F. (2016). Resilience of an online financial community to market uncertainty shocks during the recent financial crisis, **Journal of Computational Science**, 16, 190-199.

[23] Billio, M., Casarin, R., Osuntuy A. (2016). Efficient Gibbs Sampling for Markov Switching GARCH Models, **Computational Statistics and Data Analysis**, 100, 37-57.

[24] Ahelegbey D. F., Billio, M., Casarin, R. (2016). Sparse Graphical Multivariate Autoregression: A Bayesian approach, **Annals of Economics and Statistics**, 123/124, 1-30.

[25] Casarin, R., Craiu, R. and Leisen, F. (2016). Embarrassingly Parallel Sequential Markov-chain Monte Carlo for Large Sets of Time Series, **Statistics and Its Interface**, 9(4), 497-508.

[26] Casarin, R., Mantoan, G., Ravazzolo, F. (2016). Bayesian Calibration of Generalized Pools of Predictive Distributions, **Economerics**, 4(1), 1-17.

[27] Basturk, N., Casarin, R., Ravazzolo, F. and Van Dijk, H.K. (2016). Computational Complexity and Parallelization in Bayesian Econometric Analysis, **Econometrics**, 4(1), 1-9.

[28] Billio, M., Casarin, R., Costola, M., Pasqualini, A. (2016). An entropy-based early warning indicator for systemic risk, **Journal of International Financial Markets, Institutions and Money**, 45, 42-59.

[29] Casarin, R., Leisen, F., Molina, G., Ter Horst, E. (2015). Beta Markov Random Field Calibration of the Term Structure of Implied Risk Neutral Densities, **Bayesian Analysis**, 10(4), 791-819.

[30] Casnici, N., Dondio, P., Casarin, R., Squazzoni, F. (2015). Decrypting financial markets through e-joint attention efforts: On-line adaptive networks of investors in periods of market uncertainty, **PLOS One**, 10(9), 1-15.

[31] Casarin, R., Grassi, S., Ravazzolo, F. and van Dijk, H.K. (2015). Parallel Sequential Monte Carlo for Efficient Density Combination: The Deco Matlab Toolbox, **Journal of Statistical Software**, 69, 1-30.

[32] Casnici, N., Dondio, P., Casarin, R., Squazzoni, F. (2015). Back to basics! The educational gap of online investors and the conundrum of virtual communities. **Journal of Financial Management, Markets and Institutions**, 3, 51-68.

[33] Bassetti, F., Casarin, R., and Leisen, F. (2014), Pitman-Yor Process Prior for Bayesian Inference, **Journal of Econometrics**, 180, 49-72.

[34] Billio, M., Casarin, R., Ravazzolo, F., Van Dijk, H. (2013). Time-varying Combinations of Predictive Densities using Nonlinear Filtering, **Journal of Econometrics**, 177(2), 213-232.

[35] Casarin, R. and Squazzoni, F. (2013). Being on the field when the game is still under way. The financial press and stock markets in times of crisis, **PLOS One**, 8(7), 1-14.

[36] Casarin, R., Leisen, F., Craiu, R. (2013). Interacting Multiple Try Algorithms with Different Proposal Distributions, **Statistics and Computing**, 23(2), 185-200.

[37] Casarin, R., Chang C.-L., Jimenez-Martin, J.A., McAleer, M., Perez Amaral, T.,(2013). Risk Management of Risk Under the Basel Accord: A Bayesian Approach to Forecasting Value-at-Risk of VIX Futures, **Mathematics and Computer in Simulation**, 94, 183-204.

[38] Billio, M., Casarin, R., Ravazzolo, F. and van Dijk, H.K. (2012). Combination Schemes for Turning Point Predictions, **Quarterly Review of Economics and Finance**, 52, 402-412.

[39] Casarin, R., Dalla Valle, L., Leisen, F. (2012). Bayesian Model Selection for Beta Autoregressive Processes, **Bayesian Analysis**,7(1), 1-26.

[40] Billio M. and Casarin, R., (2011). Beta Autoregressive Transition Markovswitching Models for Business Cycle Analysis, **Studies in Nonlinear Dynamics and Econometrics**,15(04), 1-30.

[41] Billio M. and Casarin, R., (2010). Identifying Business Cycle Turning Points with Sequential Monte Carlo Methods: an on-line and real time application to the Euro area, **Journal of Forecasting**, 29, 145-167.
[42] Casarin, R. and Marin, J.-M., (2009). On-line data processing: A comparison of Bayesian regularized particle filters, **Electronic Journal of Statistics**, 3, 239-258.
[43] Casarin, R., Pelizzon, L. and Piva, A., (2008). Italian Equity Funds: Efficiency and Performance Persistence, **ICFAI Journal of Financial Economics**, 6(1), 7-28.
[44] Billio M. and Casarin, R., (2007). Stochastic Optimisation for Allocation Problem with Shortfall Risk Constraints, **Applied Stochastic Models in Business and Industry**, 23/3, 247-271.
[45] Casarin, R., Lazzarin, M., Pelizzon, L. and Sartore, D., (2005). Relative Benchmark Rating and Persistence Analysis: Evidence from Italian Equity Funds, **European Journal of Finance**, 11 (4), 297-308.
[46] Casarin, R. (2005). Simulation Methods for Nonlinear and Non-Gaussian Models in Finance, Premio SIE, J**ournal of the Italian Economic Association**, 2, 341-345.

**JOURNAL DISCUSSIONS**

[47] Casarin, R., Tonellato, S. (2018). Bayesian Cluster Analysis: Point Estimation and Credible Balls by Wade and Ghahramani, **Bayesian Analysis**, 53-53.
[48] Casarin, R., Iacopini, M. and Rossini, L., (2017). A discussion on: Sparse graphs using exchangeable random measures by F. Caron and E. B. Fox, **Journal of the Royal Statistical Society, Series B**, 79(5), 51-53.
[49] Casarin, R., Frattarolo, L. and Rossini, L., (2017). A discussion on: Random-projection ensemble classification by T. Cannings and R. Samworth, **Journal of the Royal Statistical Society, Series B**, 79(4), 1008-1008.
[50] Casarin, R. and Ravazzolo, F., (2016). A discussion on: Of Quantiles and Expectiles: Consistent Scoring Functions, Choquet Representations, and Forecast Ranking, by W. Ehm, T. Gneiting, A. Jordan, and A. Krueger, **Journal of the Royal Statistical Society, Series B**, 78(3), 538-539.
[51] Casarin, R. (2014). Comment on a Tractable State-Space Model for Symmetric Positive-Definite Matrices, **Bayesian Analysis**, 9(4), 793-804.
[52] Casarin, R. and Robert, C. P., (2009). A discussion on: Approximate Bayesian inference for latent Gaussian models by using integrated nested Laplace approximations by H. Rue, S. Martino, and N. Chopin, **Journal of the Royal Statistical Society, Series B**, 71 (2), 359-360
[53] Marin, J.-M., Casarin, R. and Robert, C. P., (2009). A discussion on: Approximate Bayesian inference for latent Gaussian models by using integrated nested Laplace approximations by H. Rue, S. Martino, and N. Chopin, **Journal of the Royal Statistical Society, Series B**, 71 (2), 360-362.

**BOOK CHAPTERS**

[54] Casarin, R. and Veggente, V. (2020). Random Projection Methods in Economics and Finance. In Petr, H., Uddin, M.M., and Abedin, M. Z. (ed), The Essentials of Machine Learning in Finance and Accounting, **Routledge, Taylor & Francis**, forthcoming.
[55] Casarin, R., Facchinetti, A., Sorice, D. and Tonellato, S. (2020). Decision Trees and Random Forests. In Petr, H., Uddin, M.M., and Abedin, M. Z. (ed), The Essentials of Machine Learning in Finance and Accounting, **Routledge, Taylor & Francis**, forthcoming.
[56] Bassetti, F., Casarin, R. and Ravazzolo, F. (2019). Density Forecasting. In Fuleky, P. (ed), Macroeconomic Forecasting in the Era of Big Data, **Springer Verlag**, 483-507.
[57] Billio, M., Casarin, R., Costola, M., and Frattarolo, L. (2019). Contagion Dynamics on Financial Networks. In Chevallier, J., Goutte, S., Guerreiro, D., Saglio, S. and Sanhaji, B. (eds), International Financial Markets, Vol. 1, **Routledge, Taylor & Francis**.
[58] Billio, M., Casarin, R., Costola, M. and Frattarolo, L. (2018). Disagreement in Signed Financial Networks. ln Corazza, M., Durbán, M., Grané, A., Perna, C., Sibillo, M. (eds.), Mathematical and Statistical Methods for Actuarial Sciences and Finance, **Springer Verlag**, 139-142.
[59] Billio, M., Casarin, R., and Rossini, L. (2018). Bayesian Nonparametric Sparse Vector Autoregressive Models. ln Corazza, M., Durbán, M., Grané, A., Perna, C., Sibillo, M. (eds.), Mathematical and Statistical Methods for Actuarial Sciences and Finance, **Springer Verlag**, 155-160.
[60] Billio, M., Casarin, R., and Iacopini, M. (2018). Bayesian Tensor Binary Regression. ln Corazza, M., Durbán, M., Grané, A., Perna, C., Sibillo, M. (eds.), Mathematical and Statistical Methods for Actuarial Sciences and Finance, **Springer Verlag**, 143-147.
[61] Billio, M., Casarin, R., and Iacopini, M. (2018). Bayesian Tensor Regression Models. ln Corazza, M., Durbán, M., Grané, A., Perna, C., Sibillo, M. (eds.), Mathematical and Statistical Methods for Actuarial Sciences and Finance, **Springer Verlag**, 159-163.
[62] Casarin, R., Sartore, D. and Marco, T. (2015). Sovereign Risk and Contagion Effects in the Eurozone: A Bayesian Stochastic Correlation Mode. ln Morlini I., Minerva T., Vichi M. (eds.), Advances in Statistical Models for Data Analysis, Studies in Classification, Data Analysis, **Springer Verlag**.
[63] Billio, M., Casarin, R., Costola, M. and Pasqualini, A. (2015). Entropy and systemic risk measures. ln Crocetta C. (eds.), Statistics and Demography: The Legacy of Corrado Gini, **CLEUP**, Treviso.
[64] Ahelegbey, D.F., Billio, M. and Casarin, R. (2015). Sparse BGVAR models for Systemic Risk Analysis. ln Crocetta C. (eds.), Statistics and Demography: The Legacy of Corrado Gini, **CLEUP**, Treviso.
[65] Billio, M., Casarin, R. and Osuntuyi, A. (2013). Markov Switching GARCH models for Bayesian Hedging on Energy Futures Markets, in Advances in Latent Variables, Eds. Brentari, E. and Carpita, M., **Vita e Pensiero**, Milan, 2013.

[66] Casarin, R., Sartore, D. and Tronzano, M. (2013). A Bayesian Stochastic Correlation Model for Exchange Rates, in Advances in Latent Variables, Eds. Brentari, E. and Carpita, M., **Vita e Pensiero**, Milan, 2013.
[67] Casarin, R., (2008). Solution Manual for Selected Problems, The Bayesian Choice 2nd Edition and Paperback Edition, Christian P. Robert, 2006, **Springer Verlag**.
[68] Billio M., Casarin, R. and Sartore, D., (2007). Bayesian inference in dynamic models with latent factors, in Growth and Cycle in the Eurozone (eds Mazzi, G.L. and Savio, G.), 25-44, **Palgrave Macmillan**.
[69] Casarin, R., Joutard C. and Tayeb A., (2005). Solution Manual for Selected Problems, Monte Carlo Statistical Methods, 2nd Edition, Christian P. Robert and George Casella, 2005, **Springer Verlag**.
[70] Billio M., R. Casarin, C. Mehu and D. Sartore (2000). Investment Styles in the European Equity Market, in Advances in Quantitative Asset Management, ed. C. Dunis, **Kluwer Academic Publishers**.

## NONTECHNICAL PUBLICATIONS

[71] Billio, M., Casarin, R., Ravazzolo, F. and van Dijk, H.K., (2011). Combining predictive densities using Bayesian filtering with applications to US economic data, **Medium in Econometric Theory**, 18(3), 1-8.
[72] Casarin, R. and Vergalli, S., (2010). Natural Disasters and International Insurance Market Stability, **Equilibri**,3/2010, Il Mulino.
[73] Casarin, R. (2008). Simulation Methods for Bayesian Inference on Latent Variable Models, **The ISBA Bulletin**, 15(1).

## PROCEEDINGS

[74] L. Martino, R. Casarin, and D. Luengo (2016). ticky proposal densities for adaptive MCMC methods, Proceedings of the IEEE Statistical Signal Processing Workshop, Palma de Mallorca (Spain), 26-29 June 2016.
[75] Casarin, R., Gneiting T. and Ravazzolo, F., (2014). Probabilistic Calibration of Predictive Distributions, in Proceedings of the XLVII Scientific Meeting of the Italian Statistical Society, Cagliari, CUEC.
[76] Casarin, R., Craiu R. and Leisen, F., (2012). Interacting Multiple-Try Algorithms, in Proceedings of the XLVI Scientific Meeting, SIS, Rome, CLEUP Padova.
[77] Casarin, R., Craiu R. and Leisen, F., (2011). Interacting Multiple-Try Algorithms with Different Proposal Functions, in Proceedings Applied Stochastic Models and Data Analysis, Rome, Ed. ETS, Pisa.
[78] Casarin, R. and Sartore, D., (2007). Matrix-state particle filters for Wishart stochastic volatility processes, in Proceedings SIS, 2007 Intermediate Conference, Risk and Prediction, 399-409, CLEUP Padova.
[79] Amisano, G. and Casarin, R., (2007). Particle filters for Markov-Switching Stochastic Correlation Models, in Proceedings SIS, 2007 Intermediate Conference, Risk and Prediction, 305-316, CLEUP Padova.
[80] Casarin, R., (2003). Bayesian Inference for Mixture of Stable Distributions, in Atti del Convegno Modelli Complessi e Metodi Computazionali Intensivi per la Stima e la Previsione, 4-6 Semptember 2003, Statistics Department, University of Venice.
[81] Billio, M. and Casarin, R., (2003). Extreme Returns in a Shortfall Risk Framework, in Atti della giornata di studio Metodi Numerici per la Finanza, 30 May 2003, Applied Mathematics Department, University of Venice.
[82] Casarin, R., Pelizzon, L. and Piva, A., (2003). Italian Equity Funds: Efficiency and Performance Persistence, in Atti della giornata di studio Metodi Numerici per la Finanza, 30 May 2003, Applied Mathematics Department, University of Venice.
[83] Casarin, R. and Gobbo, M., (2002). Metodi Monte Carlo per la Valutazione di Opzioni Finanziarie, in Atti della Scuola Estiva in Finanza Quantitativa, 2002, Applied Mathematics Department, University of Venice.

## WORKING PAPERS

[84] Casarin, R., Costantini, M., Osuntuyi, A. (2020). Bayesian nonparametric panel Markov-switching GARCH models, Arxiv preprint arXiV: 2012.10124.
[85] Carallo, G., Casarin, R., Robert, C.P., (2020). Generalized Poisson Difference Autoregressive Processes, Arxiv preprint arXiv:2002.04470.
[86] Buccellato, T., Busin, R., Casarin, R., Corò G., (2020). Endogeneity in Interlocks and Performance Analysis: A Firm Size Perspective, Working Paper N. 25:2020, Dept. of Economics, University Ca' Foscari of Venice.
[87] Ahelegbey, D. F., Billio, M., Casarin, R., (2020). Modeling Turning Points In Global Equity Market. SSRN Working Paper.
[88] Casarin, R., Grassi, S., Ravazzolo, F., van Dijk, H.K., (2020). A Bayesian Dynamic Compositional Model for Large Density Combinations in Finance, Rimini Centre for Economic Analysis, Working Paper Series, WP 20-27.
[89] Casarin, R. Corradin, R., Ravazzolo, R., Sartore. D. (2018) A scoring rule for factor and autoregressive models under misspecification, Working Paper N. 18/WP/2018, Dept. of Economics, University Ca’ Foscari of Venice.
[90] Casarin, R., Costola, M., Yenerdag, E., (2018). Financial Bridges and Network Communities, SAFE Working Paper No. 208.
[91] Billio, M., Casarin, R., Iacopini, M. (2018). Bayesian Markov Switching Tensor Regression for Time-varying Networks, Working Paper N. 14/WP/2018, Dept. of Economics, University Ca’ Foscari of Venice.
[92] Billio, M., Casarin, R., Kaufmann, S., Iacopini, M. (2018). Bayesian Dynamic Tensor Regression, Working Paper N. 13/WP/2018, Dept. of Economics, University Ca’ Foscari of Venice.
[93] Casarin, R., Foroni, C., Marcellino M. and Ravazzolo, F., (2017). Uncertainty Through the Lenses of a Mixed-Frequency Bayesian Panel Markov Switching Model, CEPR Discussion Paper No. DP12339.
[94] Billio, M., Casarin, R. Costola, M. Pasqualini, A. (2015). An entropy-based early warning indicator for systemic risk, Working Paper N. 9/WP/2015, Dept. of Economics, University Ca’ Foscari of Venice.

[95] Billio, M., Casarin, R. Costola, M. Pasqualini, A. (2015). An entropy-based early warning indicator for systemic risk, Working Paper N. 9/WP/2015, Dept. of Economics, University Ca' Foscari of Venice.
[96] Casarin, R., Bassetti, F., Ravazzolo, R. (2015). Bayesian Nonparametric Calibration and Combination of Predictive Distributions, Working Paper N. 4/WP/2015, Dept. of Economics, University Ca' Foscari of Venice.
[97] Alehegbey, D. F., Billio, M. and Casarin, R. (2014). Sparse Graphical Vector Autoregression: A Bayesian Approach, Working Paper N. 24/WP/2014, Dept. of Economics, University Ca' Foscari of Venice.
[98] Agudze, M.K., Billio, M., Casarin, R. and Girardin, E. (2014). Growth-cycle phases in China's provinces: A panel Markov-switching approach, Working Paper N. 19/WP/2014, Dept. of Economics, University Ca' Foscari of Venice.
[99] Casarin, R., Leisen, F., Molina, G. and Ter Horst, E. (2014). A Bayesian Beta Markov Random Field Calibration of the Term Structure of Implied Risk Neutral Densities, Working Paper N. 23/WP/2014, Dept. of Economics, University Ca' Foscari of Venice.
[100] Casarin, R. (2014). A Note Tractable State-Space Models for Symmetric Positive- Definite Matrices, Working Paper N. 22/WP/2014, Dept. of Economics, University Ca' Foscari of Venice.
[101] Martino, L., Casarin, R., Leisen, F. and Luengo, D. (2013). Adaptive Sticky Generalized Metropolis, Arxiv preprint arXiv:1308.3779.
[102] Billio, M., Casarin, R., Ravazzolo, F. and van Dijk, H.K. (2013). Interactions between eurozone and US booms and busts: A Bayesian panel Markov-switching VAR model, Norges Bank WP N. 2013/20.
[103] Bassetti, F., Casarin, R., and Leisen F., (2013). Beta-Product Dependent Pitman-Yor Processes for Bayesian Inference, Working Paper N. 13/WP/2013, Dept. of Economics, University Ca' Foscari of Venice.
[104] Casarin, R., Sartore, D. and Tronzano, M., (2013). Bayesian Markov Switching Stochastic Correlation Models, Working Paper N. 11/WP/2013, Dept. of Economics, University Ca' Foscari of Venice.
[105] Casarin, R., Grassi, S., Ravazzolo, F. and van Dijk, H.K., (2013). Parallel Sequential Monte Carlo for Efficient Density Combination: The Deco Matlab Toolbox, Working Paper N. 08/WP/2013, Dept. of Economics, University Ca' Foscari of Venice.
[106] Casarin, R., Grassi, S., Ravazzolo, F. and van Dijk, H.K., (2013). Parallel Sequential Monte Carlo for Efficient Density Combination: The Deco Matlab Toolbox,Tinbergen Institute Discussion Paper No. 2013-055/III, Tinbergen Institute.
[107] Ahelegbey, D. F., Billio, M., Casarin, R., (2013). Bayesian Graphical Models for Structural Vector Autoregressive Processes, Working Paper, Dept. of Economics, University Ca' Foscari of Venice.
[108] Billio, M., Casarin, R., Osuntuy A., (2013). Efficient Gibbs Sampling forMarkov Switching GARCH Models, Working Paper N. , Dept. of Economics, University Ca' Foscari of Venice.
[109] Casarin, R. and Squazzoni, F., (2012). Stock Markets and Financial Press in Time of Crisis, Working Paper N. 04/WP/2012, Dept. of Economics, University Ca' Foscari of Venice.
[110] Bassetti, F., Casarin, R., Leisen, F. (2011). Beta-product Poisson-Dirichlet Processes, Working Paper 11-30, Statistics and Econometrics Series 23, Universidad Carlos III de Madrid.
[111] Casarin, R., Chang C.-L., Jimenez-Martinez, J.A., McAleer, M., Perez Amaral, T. (2011). Risk Management of Risk Under the Basel Accord: A Bayesian Approach to Forecasting Value-at-Risk of VIX Futures, Econometric Institute Report EI2011-29, Erasmus University Rotterdam, Econometric Institute.
[112] Billio, M., Casarin, R., Ravazzolo, F. van Dijk, H.K. (2011). Bayesian Combinations of Stock Price Predictions with an Application to the Amsterdam Exchange Index, Tinbergen Institute Discussion Papers 11-082/4, Tinbergen Institute.
[113] Billio, M., Casarin, R., Ravazzolo, F. and van Dijk, H.K. (2011). Combination Schemes for Turning Point Predictions, Tinbergen Institute Discussion Paper No. 11-123/4, Tinbergen Institute.
[114] Casarin, R., Dalla Valle, L., Leisen, F. (2010). Bayesian Model Selection for Beta Autoregressive Processes, Arxiv preprint arXiv10080121.
[115] Billio, M., Casarin, R., Ravazzolo, F. and van Dijk, H.K., (2010). Combining predictive densities using Bayesian filtering with applications to US economics data, Technical Report No. 2010/29, Research Department, Norges Bank.
[116] Casarin, R., Craiu, R. and Leisen, F., (2010). Interacting Multiple Try Algorithms with Different Proposal Distributions, Technical Report No. 1009, Dept. of Statistics, University of Toronto.
[117] Billio, M. and Casarin, R., (2010). Bayesian Estimation of Stochastic-transition Markov-switching Models for Business Cycle Analysis, Discussion Paper N.1002, University of Brescia.
[118] Amisano, G. and Casarin, R., (2008). Particle filters for Markov-switching stochastic-correlation models, Discussion Paper N. 0814, University of Brescia.
[119] Billio, M. and Casarin, R., (2008). Identifying business cycle turning points with sequential Monte Carlo methods, Discussion Paper N. 0815, University of Brescia.
[120] Casarin, R. and Sartore, D., (2008). Matrix-State particle filter for Wishart stochastic volatility processes, Discussion Paper N. 0816, University of Brescia.
[121] Casarin, R. and Marin, J.-M., (2007). Online data processing: Comparison of Bayesian regularized particle filters, Research Report N. 6153, INRIA.
[122] Billio, M. and Casarin, R., (2006). Stochastic Optimization for Allocation Problems with Shortfall Risk Constraint, Working Paper, University of Venice.
[123] Casarin, R., Trecroci C., (2006). Business Cycle and Stock Market Volatility: A Particle Filter Approach, Cahier du CEREMADE N. 0610, University Paris Dauphine.
[124] Casarin, R. (2005). Stochastic Processes in Credit Risk Modelling, Discussion Paper N.0505, University of Brescia.
[125] Casarin, R., (2004). Bayesian Monte Carlo Filtering for Stochastic Volatility Models, Cahier du CEREMADE N. 0415, University Paris Dauphine.

[126] Casarin, R., (2004). Bayesian Inference for Generalised Markov Switching Stochastic Volatility Models, Cahier du CEREMADE N. 0414, University Paris Dauphine.

[127] Casarin, R., (2004). Bayesian Inference for Mixture of Stable Distributions, Cahier du CEREMADE N. 0428, University Paris Dauphine.

## FUTHER INFORMATION

### RESEARCH IMPACT

| | |
|---|---|
| GOOGLE | Documents 174, Citations 4691, h-index 22 |
| SCOPUS | Documents 47, Citations 397, h-index 12 |
| MATHSCI | Number of articles 13 |
| ARXIV | Number of papers 18 |
| SSRN | Author Rank 5,527 out of 411,515, Number of Document 46, Total Download 8236, Total Citations 114 |

### WEB

| | |
|---|---|
| PERSONAL | https://sites.google.com/view/robertocasarin |
| GOOGLE | https://scholar.google.it/citations?user=5bEU2N4AAAAJ&hl=it |
| ORCID | https://orcid.org/0000-0003-1746-9190 |
| SCOPUS | https://www.scopus.com/authid/detail.uri?authorId=8976184700 |
| SSRN | https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=268540 |
| ARXIV | https://arxiv.org/search/?searchtype=author&query=Casarin%2C+R |
| MATHGEN | https://www.genealogy.math.ndsu.nodak.edu/id.php?id=120609 |

### NATIONAL SCIENTIFIC EVALUATION

| | |
|---|---|
| 2013-2019 | Associate professor in Statistics for Economics (Statistica Economica, SSD SECSS/03) |
| 2013-2019 | Associate professor in Statistics (Statistica, SSD SECS-S/01) |
| 2013-2019 | Associate professor in Econometrics (Econometria, SSD SECS-P/05) |
| 2017-2023 | Full professor in Econometrics (Econometria, SSD SECS-P/05) |

### RESEARCH INTERESTS

| | |
|---|---|
| Methods | Bayesian Inference (Prior distributions, Semi-parametric and Nonparametric inference, Posterior Consistency, Model Averaging, Model Selection); Numerical methods (Monte Carlo, Markov Chain Monte Carlo, Population Monte Carlo, Sequential Monte Carlo); Random Graphs (Graph Extraction Methods). |
| Models | Dynamic Latent Factor, Stochastic Volatility, Markov-Switching, Dirichlet Processes, Diffusion Processes. |
| Macro | Business cycle analysis, Turning Point Detection, Exchange Rate. |
| Finance | Contagion, Hedging, Performance Evaluation, Risk Measurement, Systemic Risk, Volatility. |

Venice, 14th April 2021