

CONTACT INFORMATION	Vrije Universiteit Amsterdam School of Business and Economics Department of Econometrics and Data Science De Boelelaan 1105 1081 HV Amsterdam, The Netherlands	
	Date of birth: 30/01/1989 Citizenship: Italian	
RESEARCH INTERESTS	Tensor calculus - Bayesian Statistics - High-dimensional data - Econometrics - Functional data analysis - Nonparametric statistics - Graphical models - Copula models.	
REFERENCES	Monica Billio – <i>Full Professor</i> Department of Economics, Ca' Foscari University of Venice Cannaregio 873/b, 30121 Venezia - Italy E-mail: billio@unive.it	Roberto Casarin – <i>Full Professor</i> Department of Economics, Ca' Foscari University of Venice Cannaregio 873/b, 30121 Venezia - Italy E-mail: r.casarin@unive.it
	Federico Bassetti – <i>Associate Professor</i> Department of Mathematics, Polytechnic University of Milan Piazza Leonardo da Vinci 32, 20133 Milan - Italy E-mail: federico.bassetti@polimi.it	Dominique Guégan – <i>Full Professor</i> Centre d'Économie de la Sorbonne, Université Paris I - Panthéon-Sorbonne 106-112 Boulevard de l'Hôpital - 75647 Paris cedex 13 - France E-mail: Dominique.Guegan@univ-paris1.fr
POSITIONS	- (10/2020 - present) Research Fellow (Marie Skłodowska-Curie fellowship) . Vrije Universiteit Amsterdam , Department of Econometrics and Data Science, The Netherlands - (04/2019 - 03/2020) Research Fellow . Scuola Normale Superiore of Pisa , Italy - (07/2018 - 03/2019) Research Fellow . Ca' Foscari University of Venice , Department of Economics, Italy	
EDUCATION	joint Ph.D. in Economics , at Ca' Foscari University of Venice , Italy, and Ph.D. in Applied Mathematics at Université Paris I - Panthéon-Sorbonne , France (09/2014 – 07/2018) Thesis: <i>Essays on the Econometric modelling of Temporal Networks</i> . Supervisors: M. Billio, R. Casarin, D. Guégan.	
VISITING PERIODS	► Palacky University in Olomuc (Czech Republic), Department of Mathematical Analysis and Applications of Mathematics: 29 October - 2 November 2019 ► Vrije University of Amsterdam (The Netherlands), Department of Econometrics and Operations Research: 16-20 September 2019; 19-23 March 2019; 28-31 January 2019 ► Polytechnic University of Milan (Italy), Department of Mathematics: 15-17 July 2019; 6-10 May 2019 ► Ca' Foscari University of Venice (Italy), Department of Economics: 24-26 July 2019; 11-14 June 2019; 28-31 May 2019 ► University of Pavia (Italy), Department of Mathematics: 9-13 April 2018 ► Université Paris I - Panthéon-Sorbonne (France): September 2016 - June 2017	
JOB MARKET PAPER	"Bayesian dynamic tensor regression" (with Billio, M., Casarin, R. and S. Kaufmann) High dimension and multi-array data are becoming increasingly available in economics. They allow a suitable representation as tensor-valued data and this calls for appropriate econometric tools. We propose a new dynamic linear model for tensor-valued response variables and covariates that encompasses some well-known econometric models as special cases. Our contribution is manifold. First, we define a tensor autoregressive process (ART), study its properties and derive the associated impulse response function. Second, we exploit the PARAFAC low-rank decomposition for providing a parsimonious parametrization and to incorporate sparsity effects. We also contribute to inference methods for tensors by developing a Bayesian framework which allows for including extra-sample information and for introducing shrinking effects. We apply the ART model to time-varying multilayer networks of international trade and outstanding credit and study the propagation of shocks across countries, over time and between layers.	

PUBLICATIONS **Published**

7. Casarin, R., Iacopini, M., Molina, G., ter Horst, E., Espinasa, R., Sucre, C. and Rigobon, R. (2020), “Multilayer network analysis of oil linkages”, *The Econometrics Journal*, 23:(2), 269–296, <https://doi.org/10.1093/ectj/utaa003>
6. Iacopini, M. and Tonellato, S. (2018), “A discussion on: Using stacking to average Bayesian predictive distributions by Y. Yao, A. Vehtari, D. Simpson and A. Gelman”, *Bayesian Analysis*, 13(3):994–996.
5. Billio, M., Casarin, R. and Iacopini, M., (2018), “Bayesian tensor regression models”, In *Mathematical and Statistical Methods for Actuarial Sciences and Finance. MAF 2018*. Eds. Corazza, M., Durbán, M., Grané, A., Perna, C., Sibillo, M., Springer, 149–153.
4. Billio, M., Casarin, R. and Iacopini, M., (2018), “Bayesian tensor binary regression”, In *Mathematical and Statistical Methods for Actuarial Sciences and Finance. MAF 2018*. Eds. Corazza, M., Durbán, M., Grané, A., Perna, C., Sibillo, M., Springer, 143–147.
3. 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.
2. Billio, M., Casarin, R. and Iacopini, M., (2017), “Bayesian tensor regression models”, In *Proceedings of the Conference of the Italian Statistical Society. Statistics and Data Science: new challenges, new generations*. Eds. Alessandra Petrucci and Rosanna Verde, Firenze University Press, 179–186.
1. Iacopini, M., (2016), “Basics of optimization theory with applications in MATLAB and R”, *Quaderni di didattica*, Department of Economics, Ca’ Foscari University of Venice.

Manuscripts Submitted and under Review

6. Billio, M., Casarin, R. and Iacopini, M., (20XX), “Bayesian Markov switching tensor regression for time-varying networks”, [arXiv preprint 1711.00097](#) (*under review*)
5. Bianchi, D., Iacopini, M. and Rossini, L. (20XX), “Stablecoins and Cryptocurrency Returns: Evidence from large Bayesian VARs”. Available at SSRN: <https://dx.doi.org/10.2139/ssrn.3605451> (*submitted*)
4. Costola, M., Iacopini, M. and Santagiustina, C. (20XX), “Public Concern and the Financial Markets during the COVID-19 outbreak”, Available at SSRN: <http://dx.doi.org/10.2139/ssrn.3591193> (*submitted*)
3. Billio, M., Casarin, R., Kaufmann, S. and Iacopini, M., (20XX), “Bayesian dynamic tensor regression”, [arXiv preprint 1709.09606](#) (*submitted*)
2. Iacopini, M. and Santagiustina, C.R.M.A., (20XX), “Filtering the intensity of public concern from Social Media count data with jumps” (*under review*)
1. Santagiustina, C.R.M.A. and Iacopini, M. (20XX), “Visualizing and comparing distributions with half-disk density strips” (*submitted*)

Working Papers

3. Iacopini, M., Ravazzolo, F. and Rossini, L. (2020), “Proper scoring rules for evaluating asymmetry in density forecasting”. [arXiv preprint 2006.11265](#)
2. Iacopini, M. and Rossini, L. (2019), “Bayesian nonparametric graphical models for time-varying parameters VAR”, [arXiv preprint 1906.02140](#)
1. Guégan, D. and Iacopini, M. (2018), “Nonparametric forecasting of multivariate probability density functions”, [arXiv preprint 1803.06823](#)

Work in Progress

2. Bassetti, F., Casarin, R. and Iacopini, M. (20xx), “Bayesian nonparametric inference for measure-valued Autoregressive Gamma processes”
1. Bassetti, F., Casarin, R., Epifani, I. and Iacopini, M. (20xx), “Measure-valued Compound Autoregressive processes”

- SCHOLARSHIPS - [Marie Skłodowska-Curie Individual Fellowship](#) financed by the European Commission (October 2020–September 2022)
- AND GRANTS
- [Research Fellowship](#) financed by INDAM at Scuola Normale Superiore of Pisa (April 2019–March 2020)
 - [Research Fellowship](#) from Ca' Foscari University of Venice (September 2017–March 2019)
 - co-editor of the [financing proposal](#) (competition won) “Bando Label Scientifico UIF/UIF 2018” from Université Franco-Italienne (2018)
 - [Ph.D. scholarship](#) at Ca' Foscari University of Venice financed by the Ministry of Education, University and Research - MIUR (September 2014–August 2017)
 - co-editor of the [financing proposal](#) (competition won) “Bando Visiting Professor UIF 2017” from Université Franco-Italienne (2017)
 - co-editor of the [financing proposal](#) (competition won) “Bando Label Scientifico UIF/UIF 2017” from Université Franco-Italienne (2017)
 - winner of the [grant](#) “Bando Vinci 2016” from Université Franco-Italienne (2016–2017)
 - “Percorso di Eccellenza” scholarship from University of Pisa (2011–2012)
 - “Percorso di Eccellenza” scholarship from University of Pisa (2008–2011)

PRESENTATIONS **Invited Seminars**

[Seminar](#) at Department of Mathematical Analysis and Applications of Mathematics, Palacky University in Olomouc, Czech Republic, (November 1, 2019) – [Seminar](#) at School of Business and Economics, University of Maastricht, The Netherlands (April 26, 2019) – [Seminar](#) at Department of Econometrics and Operations Research, Vrije University of Amsterdam, The Netherlands (March 21, 2019) – [Seminar](#) at School of Business and Economics, University of Maastricht, The Netherlands (January 22, 2019) – [Seminar](#) at Department of Mathematics, Polytechnic University of Milan, Italy (November 8, 2018)

Contributed Presentations

[8th CoDaWork](#). Terrassa, Spain (June 4-7, 2019) – [4th Workshop on High-Dimensional Time Series in Macroeconomics and Finance](#). Wien, Austria (May 16-17, 2019) – [8th ICEEE](#). Lecce, Italy (January 24-26, 2019) – [12th CFENetwork](#). Pisa, Italy (December 14-16, 2018) – [29th EC²](#). Rome, Italy (December 13-14, 2018) – [6th SIde Workshop for PhD students in Econometrics and Empirical Economics](#). Perugia, Italy (August 23-24, 2018) – [49th SIS](#). Palermo, Italy (June 20-22, 2018) – [12th RCEA Bayesian Workshop](#). Rimini, Italy (June 14-15, 2018) – [1st QFFE](#). Marseille, France (May 30 - June 1, 2018) – [8th MAF](#). Madrid, Spain (April 4-6, 2018) – [11th CFENetwork](#). London, United Kingdom (December 16-18, 2017) – [8th ESOBE](#). Maastricht, Netherlands (October 26-27, 2017) – [41st AMASES](#). Cagliari, Italy (September 14-16, 2017) – [1st EcoSta](#). Hong Kong, Hong Kong (June 15-17, 2017) – [3rd Workshop on High-Dimensional Time Series in Macroeconomics and Finance](#). Wien, Austria (June 8-9, 2017) – [7th ICEEE](#). Messina, Italy (January 25-27, 2017) – [10th CFENetwork](#). Seville, Spain (December 9-11, 2016) – [22nd COMPSTAT](#). Oviedo, Spain (August 23-26, 2016)

Poster Presentations

[BNP 12](#). Oxford, United Kingdom (June 24-28, 2019) – [4th BAYSM](#). Warwick, United Kingdom (July 2-3, 2018) – [ISBA 2018](#). Edinburgh, United Kingdom (June 24-29, 2018) – [BNP 11](#). Paris, France (June 26-30, 2017) – [BISP-10](#). Milan, Italy (June 13-15, 2017) – [7th ESOBE](#). Venice, Italy (October 27-28, 2016)

SERVICE TO PROFESSION

Scientific and Organising Committee of Scientific Events

- Workshop “[3rd Italian-French Statistics Seminar \(IFSS\)](#)”. Italy (2020).
- Workshop “[1st EDEEM Doctoral Summer Workshop in Economics](#)”. Venice, Italy (June 13-14, 2019).
- “[Reading group on Stochastic Modelling](#)”. Venice, Italy (A.Y. 2018-2019)
- Workshop “[2nd Italian-French Statistics Seminar \(IFSS\)](#)”. Grenoble, France (September 6-7, 2018).
- Workshop on “[Advances in Bayesian modelling](#)”. Venice, Italy (July 5, 2018)
- Workshop “[1st Italian-French Statistics Seminar \(IFSS\)](#)”. Venice, Italy (October 16-17, 2017).

Organizer of Scientific Events

- Organizer and chair of the session “[Bayesian High-dimensional Sparse Models](#)” at [12th Annual RCEA Bayesian Workshop](#). Rimini, Italy (June 14-15, 2018)
- Chair of the session “[Network Econometrics](#)” at [8th MAF - International Conference on Mathematical and Statistical Methods for Actuarial Sciences and Finance](#). Madrid, Spain (April 4-6, 2018)

Discussant

- Workshop on Forecasting in Finance and Macroeconomics. Bozen, Italy (September 12, 2016)
- European Doctorate in Economics Erasmus Mundus (EDEEM) Summer Meeting. Venice, Italy (July 16-18, 2015)

Referee

Journal of Econometrics, Journal of Business & Economic Statistics, Journal of Financial Risk and

TEACHING EXPERIENCE	<p>Ca' Foscari University of Venice, Department of Economics</p> <ul style="list-style-type: none"> • Teacher – Mathematics pre-course (Graduate – English), A.y. 2019/20, 2018/19 • Tutor – Optimization (Graduate Course - PhD and Master – English), A.y. 2018/19, 2017/18, 2015/16 • Teacher – Introduction to Trigonometry (Undergraduate – English), A.y. 2017/18 • Teaching Assistant – Mathematics for Economics (Undergraduate – Italian), A.y. 2017/18 • Teaching Assistant – Statistics (Undergraduate – English), A.y. 2017/18 • Tutor – Econometrics (Graduate – English), A.y. 2015/16 • Tutor – Econometrics (Undergraduate – Italian), A.y. 2015/16
POST- GRADUATE FORMATION	<ul style="list-style-type: none"> - CIRM “Masterclass in Bayesian Statistics”. Marseille Luminy, France (22-26 October, 2018) - SIde Summer School on “Recent Developments in Financial Econometrics”. Perugia, Italy (July 23-27, 2018) - 37th Finnish Summer School on Probability and Statistics. Lammi, Finland (May 30 - June 3, 2016) - Course on “Data Analysis and Programming with R”. Bozen, Italy (November 18-20, 2015) - Course on “Bayesian Methods in Economics and Finance”. Perugia, Italy (September 7-11, 2015) - SIde Summer School on “Big Data and High-Dimensional Econometric models”. Perugia, Italy (June 29 - July 3, 2015) - SIde Summer School on “The Econometrics of Systemic Risk and Tail Correlations”. Perugia, Italy (July 14-19, 2014)
LANGUAGES & PROGRAMMING	<p>Languages: <i>Italian</i> (Mother Tongue) – <i>English</i> (Fluent, IELTS(C1), GRE) – <i>French</i> (Fluent, DELF(B2)) – <i>Spanish</i> (Basic)</p>
SKILLS	<p>Programming Skills: MATLAB, R, \LaTeX, Office (advanced); STATA13, C++, HTML5 (basic)</p>