Curriculum vitae et studiorum

Prof. GUGLIELMO D'AMICO

CONTACT
Department of Economics,
“G. D'Annunzio” University of Chieti-Pescara,
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PERSONAL DATA
Italian citizen.
Born on December, 31th, 1976, in Castel di Sangro, Italy.

ACADEMIC POSITIONS

Since 2018/11/01
Full Professor in Mathematical Methods for Economics, Finance and Insurance (Department of Pharmacy, “G. d'Annunzio” University of Chieti- Pescara, Italy. 2018/11/01 – 2020/07/13)
Full Professor in Mathematical Methods for Economics, Finance and Insurance (Department of Economics, “G. d'Annunzio” University of Chieti- Pescara, Italy, 2020/07/14 – to now).
2015/10/29 – 2018/10/2018
Associate Professor in Mathematical Methods for Economics, Finance and Insurance (Department of Pharmacy, “G. d'Annunzio” University of Chieti- Pescara, Italy).
01/09/2006-28/10/2015
Permanent Researcher and Aggregate Professor in Mathematical Methods for Economics, Finance and Insurance (Department of Pharmacy, “G. d'Annunzio” University of Chieti-Pescara, Italy).
2005-2006
Assistant of Mathematics for Economics at the University LUISS of Rome

QUALIFICATIONS

National Scientific Habilitation (Italy)

2014 February: National Scientific *Habilitation* to become *Full Professor* in Mathematical Methods for Economics, Finance and Insurance (13/D4)

2014 February: National Scientific *Habilitation* to become *Associate Professor* in Mathematical Methods for Economics, Finance and Insurance (13/D4)

EDUCATION
Ph.D.
2005 (May): Ph.D. in Mathematics for Applications in Finance and Economics, University of Rome, "La Sapienza". Thesis title: "Stochastic Finance: a semi-Markovian approach and its generalizations", Thesis supervisor: Prof. R. Manca (University of Rome "La Sapienza", Italy).

Schools attended
2006 Summer School in Mathematics organized by "Scuola Matematica Interuniversitaria" and "Scuola Normale di Pisa" Course: Mathematical Finance, Prof. W. Rungaldier, Prof. U. Schmock, Cortona 23 July - 12 August.

2005 Tutorial on "Stochastic Processes" organized by VIII Italian-Spanish Meeting on Financial Mathematics Prof. M. Frittelli Verbania 28 June – 01 July.

2005 International Summer School in "Risk Measurement and Control" organized by Università della Svizzera Italiana and Università La Sapienza di Roma, Rome 09 June – 17 June.

2004 International School on "Stochastic Comparisons: Theory and Applications" organized by Università "Politecnico" di Torino, 15 June – 18 June.
Courses:
- stochastic orders for lifetime distributions, Prof. M. Shaked
- variability and dependence orders and their applications in actuarial sciences and finance, Prof. A. Muller
- total positivity, orderings and applications, Prof. Y. Rinott

2001 Summer course in "Statistics and Probability Theory" organized by Università Bocconi. Course "Limit Theorems in Statistics" Prof. Y. Rinott, Torgnon 02 July – 21 July.

2001 Workshop "Fondamenti e Sviluppo di Teoria Economica, Matematica e Applicazioni", Pozzuoli 28 May – 15 June.
Courses:
- Cooperative games, Prof. G. Owen
- General Economic Equilibrium, Prof. P. Siconolfi
- Decisions Theory, Prof. J.M. Tallon
- Introduction to dynamic stochastic optimization, Prof. P. Secchi
- Continuous dynamic stochastic optimization, Prof. M.B. Chiarolla

- Auction theory and applications, Prof. P. Klemperer and Prof. M. Pagnozzi
- Monetary Economics, Prof. G. Camera
- Economies with differential information, Prof. N. Yannelis
- Bank Theory, Prof. A. Villamil

2001 Summer School in Mathematics organized by “Scuola Matematica Interuniversitaria”, Perugia 29 July – 01 September
Courses:
- Principles of Mathematics, Prof. M. Castellani and Prof. F. Gozzi
- Numerical Analysis, Prof. I.G. Graham

2000 Summer School in Mathematics organized by “Scuola Matematica Interuniversitaria”, Perugia 23 July – 26 August
Courses:
- Mathematical Statistic, Prof. Y. Rinott
- Probability Theory, Prof. R. Vitale

University Degree
2001 (March): University Degree (*Laurea*) in Economics (with specialization in *Theoretical Economics*), University of Chieti “G. D'Annunzio”, Italy.
Grade: *summa cum laude.* Dissertation in Mathematical Finance. Title: “Semi-Markov processes and semi-Markov decision processes with applications in disability insurance”, Thesis advisor: Prof. R. Manca (University of Chieti “G. D'Annunzio”, Italy).

ACADEMIC DUTIES

- Member of the PhD Board in “Accounting, Management and Finance”, University “G. d'Annunzio” of Chieti-Pescara, 2014; 2015.

- Member of the PhD Board in “Business and Behavioural Sciences”, University “G. d'Annunzio” of Chieti-Pescara, since 2016.

- President of the “Commissione paritetica Docenti-Studenti nel Dipartimento di Farmacia”, University “G. d'Annunzio” of Chieti-Pescara, from 2016/03/23 to 2019/07/15.

- Secretary of the “Concorso per il conferimento di n. 34 assegni per l’incentivazione delle attività di tutorato, nonchè per le attività didattico-integrative, propedeutiche e di recupero a.a. 2014/2015 nel Dipartimento di Farmacia, University “G. d'Annunzio” of Chieti-Pescara”

- Member of the “Commissione Giudicatrice per l’ammissione al corso di Dottorato di ricerca in ACCOUNTING, MANAGEMENT AND FINANCE XXXI CICLO – Sede Amministrativa: Università degli Studi G. D’Annunzio Chieti-Pescara”

- Member of the “Commissione Giudicatrice per l’ammissione al corso di Dottorato di ricerca in BUSINESS AND BEHAVIOURAL SCIENCES XXXIII CICLO – Sede Amministrativa: Università degli Studi G. D’Annunzio Chieti-Pescara”

- Member of the “Commissione Giudicatrice per l’ammissione al corso di Dottorato di ricerca in BUSINESS AND BEHAVIOURAL SCIENCES XXXV CICLO – Sede Amministrativa: Università degli Studi G. D’Annunzio Chieti-Pescara”

- Member of the “Commissione per la selezione e valutazione comparativa dei titoli per conferimento incarico collaborazione a titolo oneroso per attività formative dei corsi preparatori alle prove selettive di ammissione ai Corsi di laurea magistrale in Medicina e Chirurgia, Odontoiatria e Protesi Dentaria e ai Corsi di Laurea Professioni Sanitarie” a.a. 2019/2020 – Bando n. 497 del 04/07/2019.

- Member of the “Commissione di valutazione della procedura valutativa per la chiamata di n. 1 professore universitario di ruolo di prima fascia, ai sensi dell’art. 24, comma 6, della Legge n. 240/2010, presso l’Università degli Studi di Parma, per le esigenze del Dipartimento di Scienze Economiche e Aziendali, settore concorsuale 13/D4 –Metodi matematici dell’economia e delle scienze attuariali e finanziarie, settore scientifico-disciplinare SECS-S/06 - Metodi matematici dell’economia e delle scienze attuariali e finanziarie, indetta con Decreto Rettorale rep. DRD n. 1642/2019 PROT. 142331 del 31 luglio 2019”

- Member of the “Commissione suddivisione fondi per la ricerca (FAR) del Dipartimento di Farmacia” a.a. 2018/2019; 2019/2020.

- President of the “Commissione di valutazione della procedura valutativa per la chiamata di n. 1 posto di ricercatore a tempo determinato, ai sensi dell’art. 24, C. 3, lett. A), della legge 30 dicembre 2010, N. 240, presso l’Università del Salento, Dipartimento di Scienze dell’Economia, settore scientifico disciplinare SECS-S/06 - Metodi matematici dell’economia e delle scienze attuariali e finanziarie, nominata con D.R. n. 625 in data 15/09/2020.

TEACHING

Undergraduate courses
- “Mathematics” (undergraduate, 72 hours, Department of Economics, University G. d’Annunzio of Chieti-Pescara): 2020/2021
- “Mathematical Models for decisions of investment” (undergraduate, 48 hours, Department of Economics, University G. d’Annunzio of Chieti-Pescara): 2019/2020;
- “Principles of Mathematics” (undergraduate, 30 hours, University G. d’Annunzio of Chieti-Pescara): from 2005 to 2013; from 2015 to 2018;
- “Mathematics” (6 CFU, undergraduate, Department of Pharmacy, University G. d’Annunzio of Chieti-Pescara): from 2006 to 2013;
- “Mathematics and elements of statistics” (8 CFU, undergraduate, Department of Pharmacy, University G. d’Annunzio of Chieti-Pescara): since 2014;
- “Mathematics for the experimental sciences” (3 CFU, undergraduate, Department of Pharmacy, University G. d’Annunzio of Chieti-Pescara): 2009; 2012, 2013, 2014, 2016, 2017, 2018.
- “Statistics and Informatics for processing experimental data” (3 CFU, undergraduate,

Department of Pharmacy, University G. d'Annunzio of Chieti-Pescara): 2019.
- "Additional learning requirements in mathematics (OFA)" (12 hours, undergraduate, Department of Pharmacy, University G. d'Annunzio of Chieti-Pescara): since 2016
- Teaching Assistant in Mathematics (undergraduate, degree programme in Chemistry and Pharmaceutical Sciences, Department of Pharmacy, University G. d'Annunzio of Chieti-Pescara): from 2006 to 2010.
- Teaching Assistant in Mathematics (undergraduate, degree programme in Economics, University LUISS Guido Carli of Rome): 2005.

PhD courses

- Credit Rating Modeling (PhD in Accounting, Management and Finance, 24 hours) 2015
- Statistics (PhD in Business and Behavioural Sciences, 28 hours) 2016
- Statistics (PhD in Business and Behavioural Sciences, 16 hours) 2017, 2018, 2019

RESEARCH PROJECTS AND SUPERVISORY

Participation in Research projects

2020:

- Principal investigator of the project (PI) "Theory of semi-Markov processes" duration 1 year. Research fund "University G. d'Annunzio" of Chieti-Pescara

2019:

- Principal investigator of the project (PI) "Reliability measures for multi-state systems" duration 1 year. Research fund "University G. d'Annunzio" of Chieti-Pescara

2018:

- Principal investigator of the project (PI) "Mathematical Models of Poverty" duration 1 year. Research fund "University G. d'Annunzio" of Chieti-Pescara

2017:

- FFABR- "Fondo per il finanziamento delle attività di base di ricerca" MIUR grant.
- Member of the project titled "Young Investigator Training Program - 3rd Workshop Energy Finance Italia" proposed by the Dipartimento di Matematica "Tullio Levi Civita" University of Padova, Under evaluation by ACRI.
- Principal investigator of the project (PI) "Metodi stocastici per la gestione di un parco eolico" duration 1 year. Research fund "University G. d'Annunzio" of Chieti-Pescara

2016:

- Principal investigator of the project (PI) "Stochastic Finance and Memory" duration 1 year. Research fund "University G. d'Annunzio" of Chieti-Pescara

2015:

- Grant "0000012765 Université de Reims Champagne-Ardenne" Visiting Professor at the "*Laboratoire de Mathématiques de Reims EA4535*" France. From 19/05/2015 to 26/05/2015

- Principal investigator of the project (PI) “Asymptotic results for indexed semi-Markov chains” duration 1 year. Research fund “University G. d'Annunzio” of Chieti-Pescara

2014:
- PI “Multivariate semi-Markov models and applications” duration 1 year. Research fund “University G. d'Annunzio” of Chieti-Pescara

2013:
- PI “Long memory semi-Markovian models” duration 1 year. Research fund “University G. d'Annunzio” of Chieti-Pescara

2012:
- PI Grant “Federation Normandie Mathematiques FR CNRS 3335” Visiting Professor at the “*Laboratoire de Mathématiques Raphaël Salem*”, Université de Rouen (France) and “*Laboratoire de Mathématiques Nicolas Oresme*” Université de Caen (France). From 09/03/2012 to 23/03/2012 and from 03/05/2012 to 17/05/2012.
- PI “Long memory semi-Markovian models” duration 1 year. Research fund “University G. d'Annunzio” of Chieti-Pescara

2011:
- PI Grant “Federation Normandie Mathematiques FR CNRS 3335” Visiting Professor at the “*Laboratoire de Mathématiques Raphaël Salem*”, Université de Rouen (France) and “*Laboratoire de Mathématiques Nicolas Oresme*” Université de Caen (France). From 23/10/2011 to 12/11/2011
- PI “Higher orders semi-Markov chains and their applications” duration 1 year. Research fund “University G. d'Annunzio” of Chieti-Pescara

2010:
- PI “Generalized semi-Markov processes and applications” duration 1 year. Research fund “University G. d'Annunzio” of Chieti-Pescara

2008:
- Member of the Unit of Rome PRIN 2008 “Risparmio previdenziale e benefici pensionistici privati: scelte individuali, rischi per il gestore”. PI: prof. E. Pitacco University of Trieste. Duration 2 years.

2006:
- Member of the Unit of Rome PRIN 2006 “La protezione del reddito contro I rischi longevità e salute: analisi attuariale, finanziaria ed economica dei benefici pensionistici e previdenziali. Evoluzione e prospettive del mercato”. PI: prof. E. Pitacco University of Trieste. Duration 2 years.

2004:
- Member of the Unit of Rome PRIN 2004 “Metodi e strumenti attuariali e finanziari per

l'analisi e la gestione dei rischi nei prodotti assicurativi vita e nei fondi pensione". PI: prof. E. Pitacco University of Trieste. Duration 2 years

2003:
- 30/09/2003 – 23/12/2003 Visiting Researcher at the "*Department of Mathematics and Physics*", Malardalen University of Vasteras (Sweden). Supervisor Prof. Dmitrii S. Silvestrov.

21/01/2003 – 26/06/2003 Visiting Researcher at the "*Département de Génie Informatique*", Equipe des Mathématiques appliquées, Université de Technologie de Compiègne (France). Supervisor Prof. Nikolaos Limnios.

2002:
- Member of the Unit of Rome PRIN 2002 "Specificazione e stima di modelli di pensionamento e relativa valutazione del fondo". PI: prof. E. Pitacco University of Trieste. Duration 2 years.

Supervision of Ph.D. Student and research groups
- Dr. Giovanni Salvi, Sapienza Università di Roma, Scuola di Dottorato in Economia, Dottorato di Ricerca in Matematica per le applicazioni Economico-Finanziarie XXV ciclo. Titolo della tesi "On Semi-Markov Processes and Financial Applications. (2010-2012)

- Dr. Flavio Prattico, Università dell'Aquila, Dottorato di Ricerca in Ingegneria Meccanica, Energetica e Gestionale XXVII ciclio, Titolo della tesi "Wind Speed Modeling Through Semi-Markov Models". (2012-2014)

- Dr. Riccardo De Blasis, Università di Chieti-Pescara, Dottorato di Ricerca in Accounting Management and Finance, XXXI ciclo. (2015 – 2019)

- Dr. Stefania Scocchera, Università di Chieti-Pescara, Dottorato di Ricerca in Accounting Management and Finance, XXXI ciclo. (2015 – 2019)

- Dr. Bice Di Basilio, Università di Chieti-Pescara, Dottorato di Ricerca in Business and Behavioural Sciences, XXXIII ciclo. (2017 – to date)

- Dr. Salvatore Vergine, Università di Chieti-Pescara, Dottorato di Ricerca in Business and Behavioural Sciences, XXXV ciclo. (2019 – to date)

Participation in Thesis Committees
- Rinaldi Marco, University "La Sapienza" of Rome, Ph.D. in Mathematics for Economic-Financial Applications

- Pantanella Alexandre, University “La Sapienza” of Rome, Ph.D. in Mathematics for Economic-Financial Applications
- Martire Antonio, University “La Sapienza” of Rome, Ph.D. in Mathematics for Economic-Financial Applications
- Ferrari Giorgio, University “La Sapienza” of Rome, Ph.D. in Mathematics for Economic-Financial Applications
- De Angelis Tiziano, University “La Sapienza” of Rome, Ph.D. in Mathematics for Economic-Financial Applications
- Ragno Costantino, University of Camerino, Ph.D. in “Science and Technology - Mathematics” (2019)
- Corona Dario, University of Camerino, Ph.D. in “Science and Technology - Mathematics” (2019)
- Jean-Paul Murara, Malardalen University of Vasteras, Sweeden, Ph.D. In “Mathematics/Applied mathematics” October 04, (2019).

RESEARCH
Main interests
Stochastic Processes (Markov processes, Semi-Markov processes and generalizations, Storage Impulsive Processes, Nonparametric estimation of functionals of Markov and semi-Markov processes, Entropic measures for stochastic processes);
Financial Mathematics (Credit rating modelling; Modelling of high frequency financial data; Fundamental analysis; Derivatives; Interest rates modelling);
Insurance Mathematics (Disability insurance; Risk Theory);
Mathematical Economics (Income inequality modelling; Poverty modelling and estimation);
Reliability Theory (Maintenance models; Performability models; Age-usage models; Single-use reliability models);
Wind Energy (Wind speed and energy modelling; Wind energy risk management).

HONOURS AND AWARDS
- 2012 The article “First and second order semi-Markov chains for wind speed modeling” received the “Best paper awards for young scientists” to the 2nd Stochastic Modeling techniques and data Analysis (SMTDA 2012) International Conference. The research was presented by Dr. Flavio Prattico.

- 2011 The article “Immigration effects on Economic System through Dynamic Inequality Indices” received the “Outstanding Research Award” to the Global Conference on Business and Finance. The research was presented by Prof. Giuseppe Di Biase

PUBLICATIONS
Books
[2] “Semi-Markov Migration Models for Credit Risk” (joint with Di Biase G., Janssen, J., Manca R.) ISBN: 978-1-84821-905-2 316 pages May 2017, Wiley-ISTE

[1] “La Dolce Matematica” (joint with Di Biase G.) ISBN: 9788891002556 260 pages Ilmiolibro self publishing 2015.

Articles in refereed journals

[90] " Performance estimation of photovoltaic energy production " (joint with Casula, L., Masala, G. and Petroni, F.) *Letters in Spatial and Resource Sciences* 1-19 (2020).

[89] "Insurance Contracts for Hedging Wind Power Uncertainty" (joint with F. Gismondi and F. Petroni) *Mathematics* 8.8 (2020): 1376.

[88] "Managing Wind Power Generation via Indexed Semi-Markov Model and Copula" (joint with G. Masala, F. Petroni and R.A. Sobolewski) *Energies* 13.16 (2020): 4246.

[87] “Performance estimation of a wind farm with a dependence structure between electricity price and wind speed” (joint with L. Casula, G. Masala and F. Petroni) *The World Economy* Early View First published: 22 April 2020

[86] “Portfolio optimization of credit risky bonds: a semi-Markov process approach” (joint with P. Puneet, S. Dharmaraja and R. Manca) *Financial Innovation* *6* Article number: (25), 14 pages, 2020

[85] “A multivariate Markov chain stock model” (joint with R. De Blasis) *Scandinavian Actuarial Journal* 2020(4), 272-291, 2020

[84] “A copula based Markov Reward approach to the credit spread in European Union” (joint with F. Petroni, P. Regnault, S. Scocchera and L. Storchi) *Applied Mathematical Finance* 26(4), 359-386, 2019

[83] “On the sensitivity of a Dynamic Measure of Financial Inequality” (joint with S. Scocchera and L. Storchi) *Journal of Mathematics and Statistics* 15, 280-297 (2019).

[82] “Risk Management of Pension Fund: a model for salary evolution” (joint with A. Lika and F. Petroni) *International Journal of Financial Studies* 7(44), 1-17 (2019).

[81] “Optimal control of a dispatchable energy source for wind energy management” (joint with F. Petroni and R.A. Sobolewski) *Stochastics and Quality Control* 34(1), 19-34 (2019).

[80] “Change point dynamics for financial data: an indexed Markov Chain approach” (joint with A. Lika and F. Petroni) *Annals of Finance*, 15(2), 247–266 (2019).

[79] “Stock market daily volatility and information measures of predictability” (joint with F. Gismondi, F. Petroni and F. Prattico) *Physica A: Statistical Mechanics and its Applications* 518, 22-29 (2019).

[78] “A Review of Non-Markovian Models for the Dynamics of Credit Ratings” (joint with S. Dharmaraja, R. Manca, P. Pasricha) *Reports on Economics and Finance* 5(1), 15-33 (2019).

[77] “Dynamic Measurement of Poverty: Modeling and Estimation” (joint with P. Regnault) *Sankhya B* 80(2), 305-340 (2018)

[76] “A Continuous-Time Inequality Measure Applied to Financial Risk: The Case of the European Union” (joint with P. Regnault, S. Scocchera, L. Storchi) *International Journal of Financial Studies* 6 (3), 62 (2018)

[75] “Financial risk distribution in European Union” (joint with S. Scocchera, L. Storchi) *Physica A: Statistical Mechanics and its Applications* 505, 252-267 (2018)

[74] “Copula based multivariate semi-Markov models with applications in high-frequency finance” (joint with F. Petroni) *European Journal of Operational Research* 267 (2), 765-777 (2018)

[73] “Stochastic dividend discount model: risk and return” *Markov Processes and Related Fields* 23, 349-376 (2017)

[72] “The Study of Basic Risk Processes by Discrete Time Non-Homogeneous Markov Processes” (joint with Gismondi, F., Janssen, J., Manca, R., Petroni, F. and Volpe di Prignano, E.) *Theory of Probability and Mathematical Statistics* 96, 33-48 (2017)

[71] “Multi-state models for evaluating conversion options in life insurance” (joint with Guillen, M., Manca, R. and Petroni, F.) *Modern Stochastics: Theory and Applications* 4(2), 127-139 (2017)

[70] “Novel advancements in the Markov chain stock model: analysis and inference” (joint with Barbu V.S., and De Blasis, R.) *Annals of Finance* 13, 125-152 (2017)

[69] “On the limit distribution of a second order semi-Markov chain in state and duration” (joint with F. Petroni and F. Prattico) *Communications in Statistics: Theory and Methods* 46(12), 5994-5999 (2017)

[68] “Insuring wind energy production” (joint with F. Petroni and F. Prattico) *Physica A: statistical mechanics and its applications* 467, 542-553 (2017)

[67] “Step semi-Markov models and application to manpower management” (joint with

Barbu V.S., Manca R. and Petroni, F.) _ESAIM Probability & Statistics_ 20, 555-571 (2016)

[66] “Theory and practice of stochastic models and data analysis” (joint with R. Manca and S. McClean), _Communications in Statistics - Theory and Methods_, 45(6), 1577-1579 (2016)

[65] “Tornadoes and related damage costs statistical modeling with a semi-Markov approach” (joint with C. Corini, R. Manca, F. Petroni and F. Prattico) _Geomatics, Natural Hazards and Risk_ 7(5), 1600-1609 (2016)

[64] “Bivariate semi-Markov reward chain and credit spreads” (joint with R. Manca and G. Salvi) _IMA Journal of Management Mathematics_ 27(4), 529-556 (2016)

[63] “Downward migration credit risk problem: a non-homogeneous backward semi-Markov reliability approach” (joint with J. Janssen and R. Manca) _The Journal of the Operational Research Society_ 67, 393-401 (2016)

[62] “Rate of Occurrence of Failures (ROCOF) of Higher-Order for Markov Processes: Analysis, Inference and Application to Financial Credit Ratings” _Methodology and Computing in Applied Probability_ 17, 929-949 (2015)

[61] “Discrete Time Homogeneous Markov Processes for the Study of the Basic Risk Processes” (joint with F. Gismondi, J. Janssen and R. Manca) _Methodology and Computing in Applied Probability_ 17, 983-998 (2015)

[60] “Stochastic impulsive processes on a superposition of two renewal processes” (joint with V.S. Koroliuk and R. Manca) _Journal of Mathematical Sciences_ 206(1), 644-651 (2015)

[59] “Homogeneous Discrete Time Alternating Compound Renewal Process: a Disability Insurance application” (joint with F. Gismondi, J. Janssen and R. Manca) _Mathematical Problems in Engineering_ Volume 2015, Article ID 874101, 13 pages

[58] “Wind speed prediction for wind farm applications by Extreme Value Theory and Copulas” (joint with F. Petroni, and F. Prattico) _Journal of Wind Engineering and Industrial Aerodynamics_ 145, 229-236 (2015)

[57] “Reliability measures for indexed semi-Markov chains applied to wind energy production” (joint with F. Petroni, and F. Prattico) _Reliability Engineering and System Safety_ 144, 170-177 (2015)

[56] “Economic performance indicators of wind energy based on wind speed stochastic modeling” (joint with F. Petroni, and F. Prattico) _Applied Energy_ 154, 290-297 (2015)

[55] “Performance analysis of second order semi-Markov chains: an application to wind energy production” (joint with F. Petroni, and F. Prattico) *Methodology and Computing in Applied Probability* 17(3) 781-794 (2015)

[54] “Measuring Income Inequality: an Application of the Population Dynamic Theil's Entropy” (joint with Di Biase G., and Manca R.) *Accounting and Taxation,* 7(1), 103-114 (2015)

[53] “Moments Analysis of a Markov-Modulated Risk Model with Stochastic Interest Rates” *Communications on Stochastic Analysis* 8(2), 227-246 (2014)

[52] “Multivariate High-Frequency Financial Data via Semi-Markov Processes” (joint with F. Petroni) *Markov Processes and Related Fields,* 20, 415-434 (2014)

[51] “Single-use reliability computation using semi-Markov chain models” *Applications of Mathematics* 59(5), 571-588 (2014)

[50] “Decomposition of the Dynamic Theil’s Entropy and its Application to four European Countries” (joint with G. Di Biase and R Manca) *Hitotsubashi Journal of Economics,* 55, 229-239 (2014)

[49] “Duration Dependent Rating Migration Models: a Real Data Application and Cost of Capital Estimation” (joint with Di Biase G., Janssen J., and Manca R.) *Finance a Uver-Czech Journal of Economics and Finance* 64(3), 233-245 (2014)

[48] “Bivariate semi-Markov Process for Counterparty Credit Risk” (joint with R. Manca and G. Salvi) *Communications in Statistics: theory and methods* 43, 1503-1522 (2014)

[47] “Wind speed and energy forecasting at different time scales: A nonparametric approach” (joint with Petroni F. and Prattico F.) *Physica A: Statistical Mechanics and its Applications* 406, 59-66 (2014)

[46] “Storage Impulsive Processes in merging phase space” (joint with V.S. Koroliuk and R. Manca) *Journal of Mathematical Sciences* 196(5), 644-651 (2014)

[45] “Storage Impulsive Processes on increasing time intervals” (joint with V.S. Koroliuk and R. Manca) *Theory of Probability and Mathematical Statistics* 89, 66-76 (2013)

[44] “A semi-Markov approach to the stock valuation problem” *Annals of Finance* 9(4), 589-610 (2013)

[43] “Effects on Taxation on the Forecasting of Income Inequality: Evidence from Germany,

Greece, and Italy" (joint with G. Di Biase, and R. Manca) Panoeconomicus 6, 707-723 (2013)

[42] "Wind speed modeled as a semi-Markov process with memory" (joint with F. Petroni and F. Prattico) Environmetrics 24(6), 2189-2201 (2013)

[41] "The Input Evaluation of Generalized Bernoulli Processes for Salary Lines Construction by Means of Continuous Time Generalized Non-Homogeneous Semi-Markov Processes" (joint with G. Di Biase, J. Janssen and R. Manca) Communications in Statistics: Theory and Methods 42(16), 2189-2201 (2013)

[40] "A semi-Markov modulated interest rate model" (joint with R. Manca and G. Salvi) Statistics and Probability Letters 83, 2094-2102 (2013)

[39] "Reliability Measures of Second-Order Semi-Markov Chain Applied to Wind Energy Production" (joint with F. Petroni and F. Prattico) Journal of Renewable Energy Volume 2013, Article ID 368940, 6 pages doi:10.1155/2013/368940

[38] "First and second order semi-Markov chains for wind speed modeling" (joint with F. Petroni and F. Prattico) Physica A: Statistical Mechanics and its Applications 392, 1194-1201 (2013)

[37] "Semi-Markov Disability Insurance Models" (joint with M. Guillen and Manca R.) Communications in Statistics: Theory and Methods 42(16), 2172-2188 (2013)

[36] "Mono-unireducible non-homogeneous semi-Markov processes applied to rating migration models" (joint with J. Janssen and R. Manca) Advances in Decision Sciences vol. 2012, Article ID 123635, 12 pages doi:10.1155/2012/123635

[35] "Weighted-indexed semi-Markov models for modeling financial returns" (joint with F. Petroni) Journal of Statistical Mechanics: Theory and Experiment (2012) doi:10.1088/1742-5468/2012/07/P0701

[34] "A semi-Markov model for price returns" (joint with F. Petroni) Physica A: Statistical Mechanics and its applications 391, 4867-4876 (2012)

[33] "Income Inequality Dynamic Measurement of Markov Models: Application to some European Countries" (joint with G. Di Biase and Manca R.) Economic Modelling 29(5), 1598-1602 (2012)

[32] "A system maintenance approach to analyzing the Italian judicial system reform proposal of 2010" (joint with Manca R.) *Socio-Economic Planning Sciences* 46, 205-215 (2012)

[31] "A semi-Markov model with memory for price changes" (joint with Petroni F.) *Journal of Statistical Mechanics: Theory and Experiment* (2011) doi:10.1088/17425468/2011/12/P12009

[30] "Discrete time non-homogeneous semi-Markov reliability transition credit risk models and the default distribution functions" (joint with Janssen J. and Manca R.) *Computational Economics* 38, 465–481 (2011)

[29] "Duration Dependent semi-Markov Models" (joint with Janssen J. and Manca R.) *Applied Mathematical Sciences* 5(42), 2097-2108 (2011)

[28] "Age-usage semi-Markov models" *Applied Mathematical Modelling* 35, 4354-4366 (2011)

[27] "Immigration Effects on Economic System through Dynamic Inequality Indices" (joint with Di Biase G., Manca R.) *Global Journal of Business Research* 5(5), 11-25 (2011)

[26] "Nonparametric estimation of a path-dependent health-related quality of life index" *Model Assisted Statistics and Applications* 6(2), 99-110 (2011)

[25] "HIV Evolution through Two Different Temporal Scales According to Non-Homogeneous Semi-Markov Models" (joint with Di Biase G., Janssen J., Manca R.) *Informatica* 22(1), 27-42 (2011)

[24] "A non-homogeneous semi-Markov reward model for the credit spread computation" (joint with Janssen J., Manca R.) *International Journal of Theoretical and Applied Finance* 14(2), 221-238 (2011)

[23] "A Customer's utility measure based on the reliability of multi-state systems" (joint with Di Biase G., Manca R.) *Decisions in Economics and Finance: A Journal of Applied Mathematics* 34(1), 1-20 (2011)

[22] "Discrete time Markov Reward Processes: a Motor Car Insurance Example" (joint with Janssen J., Manca R.) *Technology and Investment* 1, 135-142 (2010)

[21] "Initial and Final Backward and Forward Discrete Time Non-Homogeneous Semi-

Markov Credit Risk models" (joint with Janssen J. and Manca R.) *Methodology and Computing in Applied Probability* 12(2), 215-225 (2010)

[20] "Quality of life measure through Markov Reward Processes: analysis and inference" *Environmetrics* 21(2), 208-220 (2010)

[19] "Generalized Concentration/Inequality Indices of Economic Systems Evolving in Time" (joint with Di Biase G.) *WSEAS Transactions on Mathematics* 9(2), 140-149 (2010)

[18] "Semi-Markov Backward Credit Risk Migration Models: a Case Study" (joint with Di Biase G., Janssen J., Manca R.) *International Journal of Mathematical Models and Methods in Applied Sciences* 4(1), 82-92 (2010)

[17] "Nonparametric Estimation of the expected accumulated reward for semi-Markov chains" *Statistics and Operations Research Transactions (SORT)* 33(2), 159-170 (2009)

[16] "Semi-Markov Reliability Models with Recurrence Times and Credit Rating Applications" (joint with Janssen J. and Manca R.) *Journal of Applied Mathematics and Decision Sciences* volume 2009, Article ID 625712, 17 pages

[15] "Full backward non-homogeneous semi-Markov processes for disability insurance models: a Catalunya real data application" (joint with Guillen M. and Manca R.) *Insurance: Mathematics and Economics* 45, 173-179 (2009)

[14] "The crossing barrier of a non-homogeneous semi-Markov chain" *Stochastics: An International Journal of Probability and Stochastic Processes* 81(6), 589-600 (2009)

[13] "European and American Options: the semi-Markov case" *(joint with Janssen J., Manca R.)* *Physica A: Statistical mechanics and its applications* 388, 3181-3194 (2009)

[12] "Patient's age depending HIV/AIDS Evolution Analysis by means of a Non Homogeneous Semi-Markov Model" (joint with Di Biase G., Janssen J. and Manca R.) *Advances and Applications in Statistics* 11(2), 199-215 (2009)

[11] "A Semi-Markov Maintenance Model with Credit Rating Application" *IMA Journal of Management Mathematics* 20(1), 51-58 (2009)

[10] "A convergence result in the estimation of Markov chains and its applications to Compound Option" *Journal of Statistical Theory and Practice* 2(4), 693-705 (2008)

[9] "Monte Carlo semi-Markov methods for credit risk migration models and Basel II rules

II Part" *(joint with E. Biffi, Di Biase G., Janssen J., Manca R., Silvestrov D.)* *Journal of Numerical and Applied Mathematics* 1(96), 59-86 (2008)

[8] "Monte Carlo semi-Markov methods for credit risk migration models and Basel II rules I Part" (joint with E. Biffi, Di Biase G., Janssen J., Manca R., Silvestrov D.) *Journal of Numerical and Applied Mathematics* 1(96), 28-58 (2008)

[7] "Characterization of alkanoyl-10-O-minocyclines in micellar dispersions as potential agents for treatment of human neurodegenerative disorders" (joint with A. Di Stefano, Sozio P., Iannitelli A., Cerasa L. S., Fontana A., Di Biase G., Di Giulio M., Carpentiero C., Grumetto L., Barbato F.) *European Journal of Pharmaceutical Sciences* 34, 118-128 (2008)

[6] "Statistical Inference for Max-min Markov chains and applications to lookback options" *Bulletin of Statistics and Economics* 2, 2-15 (2008)

[5] "A 13-state homogeneous semi-Markov model for predicting the HIV disease evolution: a case study" (joint with G. Di Biase, Di Girolamo A., Janssen J., Iacobelli S., Tinari N. and Manca R.) *Far East Journal of Mathematical Sciences* 27(1), 89-109 (2007)

[4] "A Stochastic Model for the HIV/AIDS Dynamic Evolution" (joint with G. Di Biase, Di Girolamo A., Janssen J., Iacobelli S., Tinari N. and Manca R.) *Mathematical Problems in Engineering* 2007, Article ID 65636, 14 pages

[3] "Valuing Credit Default Swap in a Semi-Markovian rating-based Model" (joint with Janssen J. and Manca R.) *Computational Economics* 29, 119-138 (2007)

[2] "Statistical Inference for Markov Chain European Option: estimating the price, the bare risk and the theta by historical distributions of Markov chain" *Journal of Statistics and Management Systems* 9(3), 737-754 (2006)

[1] "Homogeneous semi-Markov reliability models for credit risk management" (joint with J. Janssen, R.Manca) *Decisions in Economics and Finance: A Journal of Applied Mathematics* 28(2), 79-93 (2005)

Chapters in collective books

[14] "A New Approach to the Modeling of Financial Volumes" (joint with Gismondi, F. and Petroni F.) In Stochastic Processes and Applications, Eds: Silvestrov, Sergei, Malyarenko, Anatoliy, Rancic, Milica, Springer Proceedings in Mathematics & Statistics, vol 271, DOI DOI10.1007/978-3-030-02825-1_15 Chapter 15, pp. 363-373, Springer International Publishing AG 2018

[13] “Decision model of wind turbines maintenance planning” (joint with Petroni F. and Sobolewski R.) In Contemporary Complex Systems and Their Dependability, Eds: Zamojski W., Mazurkiewicz J., Sugier J., Walkowiak T., Kacprzyk J.. Advances in Intelligent Systems and Computing 761, DOI: 10.1007/978-3-319-91446-6_41 pp. 440-450, Springer Verlag 2019 ISBN: 978-331991445-9

[12] “Maintenance of Wind Turbine Scheduling Based on Output Power Data and Wind Forecast” (joint with Petroni F. and Sobolewski R.) In Advances in Dependability Engineering of Complex Systems, Eds: W. Zamojski et al., Advances in Intelligent Systems and Computing 582, DOI 10.1007/978-3-319-59415-6_11 Chapter 11, pp. 106-117, Springer International Publishing AG (2017)

[11] “On a stochastic extension of the Herfindahl-Hirschman index” (joint with G. Di Biase and R. Manca) In *New Perspectives on Stochastic Modeling and Data Analysis*, Eds: J. Bozeman, V. Girardin and C. H. Skiadas, pp. 49-61 (2014) ISAST, ISBN 978-618-80698-7-9

[10] “Forecasting wind speed financial return” (joint with F. Petroni and F. Prattico). In *New Perspectives on Stochastic Modeling and Data Analysis*, Eds: J. Bozeman, V. Girardin and C. H. Skiadas, pp 97-112, (2014) ISAST, ISBN 978-618-80698-7-9

[9] “Disability Insurance Claims Study by a Homogeneous Discrete Time Alternating Renewal Process” (joint with F. Gismondi, J. Jacques and R. Manca) In *Modern Problems of Insurance Mathematics*, Eds: D. Silvestrov and A. Martin-Lof, Springer, pp 187-196, (2014) Springer, ISBN 978-3-319-06652-3

[8] "Semi-Markov Models in High Frequency Finance: A Review” (joint with F. Petroni and F. Prattico) Eds: F. Petroni, F. Prattico and G. D'Amico, In *Stock Markets: Emergence, Macroeconomic Factors and Recent Developments* pp. 175-192 Nova Science Publisher, Series: Economic Issues, Problems and Perspectives, (2013) ISBN: 978-1-62808-751-2

[7] "Dynamic Concentration/Inequality Indices of Economic Systems” (joint with Di Biase G) Eds: C.A. Bolucea, V. Mladenov, E. Pop, M. Leba, N. Mastorakis In *Recent Advances in Applied Mathematics* pp. 312-316 WSEAS Press, (2009), ISSN: 1790-2769, ISBN: 978-960-474-138-0

[6] "Semi-Markov Backward Credit Risk Migration Models Compared with Markov Models” (joint with Di Biase G., Janssen J., Manca R.) Eds: P. Pardalos, N. Mastorakis, V. Mladenov and Z. Bojkovic, In *Proceedings of the 3rd International Conference on Applied Mathematics, Simulation, Modeling* pp. 112-116 WSEAS Press, (2009), ISSN: 1790-5117, ISBN: 978-960-474-147-2

[5] "The Dynamic behaviour of single-unireducible non-homogeneous Markov and semi-Markov chains"(joint with Janssen J., and Manca R.) In Eds. A. Naimzada, S. Stefani, A. Torriero, In *Networks: Topology and Dynamic Lectures Notes in Economic and Mathematical Systems,* vol 613, pp. 195-211, (2009), Springer-Verlag, ISBN 978-3-540-68407-7

[4] "An application of Markov Reward Processes to the Italian Bonus-Malus System" (joint

with G. De Medici) Eds: Angela C, Carrillo Menendez S., Micocci M., Navarro Arribas E., Ottaviani R. and Pressacco F. In *New Frontiers in Insurance and Bank Risk Management* chapter 4, pp. 43-54, 2009, ISBN: 978-88-386-6061-0, *McGraw-Hill Italia*.

[3] "HIV Evolution through Two Different Temporal Scales According to Non-Homogeneous Semi-Markov Models" (joint with Di Biase G., Janssen J., Manca R.) Eds: L. Sakalauskas, C. Skiadas and E.K. Zavadskas In *Proceedings of the XIII International Conference "Applied Stochastic Models and Data Analysis* pp. 473-476 June 30-July 3, (2009), Vilnius, Lithuania ISBN: 978-9955-28-463-5

[2] "Homogeneous and Non-Homogeneous Semi-Markov Backward Credit Risk Migration Models" (joint with Di Biase G., Janssen J., Manca R.) Ed. Patrick N. Catlere, In *Financial Hedging* (2009) Nova Science Publishers ISBN: 978-1-60876-670-3

[1] "Credit risk migration semi-Markov models: a reliability approach" (joint with J. Janssen, R. Manca) Eds: J. Janssen and P. Lenca In *Proceedings of the XI Applied Stochastic Models and Data Analysis Symposium,* pp. 950-957 (2005), ENST Bretagne Technopole, Brest

Abstract in review

[3] "A reward semi-Markov process with memory for wind speed modelling" (joint with F. Petroni, F. Prattico) In GEOPHYSICAL RESEARCH ABSTRACTS - ISSN:1607-7962 (2012).

[2] "Indexed semi-Markov process for wind speed modeling" (joint with F. Petroni, F. Prattico) In GEOPHYSICAL RESEARCH ABSTRACTS - ISSN:1607-7962 (2012).

[1] "First and second order semi-Markov chains for wind speed modeling" (joint with F. Petroni, F. Prattico) In GEOPHYSICAL RESEARCH ABSTRACTS - ISSN:1607-7962 (2012).

Editorial activity

[5] Special Issue in "Communications in Statistics – Theory Methods" dedicated to the "International Conference SMTDA2016" Eds: Guglielmo D'Amico, Sally McClean, and Christos Skiadas, Taylor and Francis, (2019).

[4] "Theory and Practice of stochastic models and data analysis" Special Issue in Communications in Statistics – Theory Methods Eds: Guglielmo D'Amico, Raimondo Manca and Sally McClean, Taylor and Francis (2016).

[3] "Stock Markets: Emergence, Macroeconomic Factors and Recent Developments" (joint with F. Petroni, F. Prattico) Nova Science Publisher, Series: Economic Issues, Problems and Perspectives Pub. Date: 2013 - 4th Quarter ISBN: 978-1-62808-751-2

[2] "PROCEEDINGS ASMDA 2011" (joint with G Di Biase, J Janssen, R Manca) Edizioni ETS Publisher, ISBN: 97888467-3045-9

[1] Reviewer Editor of the journal “Frontiers in Applied Mathematics and Statistics” speciality section “Mathematical Finance”

Research presentations

2020:

• StatMod2020 “Statistical Modeling with Applications” November 6-7, 2020 “Gheorghe Mihoc-Caius Iacob” Institute of Mathematical Statistics and Applied Mathematics, Bucharest, Romania

2019:

• The 22nd Conference of the Romanian Society of Probability and Statistics, Bucharest, May 10 - 11, 2019
• The 11th International Conference on Mathematical Methods in Reliability (MMR2019) 3 - 7 June, 2019 in Hong Kong
• The 18th Conference of the Applied Stochastic Models and Data Analysis International Society (ASMDA 2019) 11 - 14 June, 2019 in Firenze, Italy
• The 2th Italian Meeting on Probability and Mathematical Statistics, 17 - 20 June, 2019 in Vietri sul Mare, Italy
• The International Conference on Financial and Energy Markets: Modeling and Simulation (FEMMS 2019) 20 - 22 June, 2019 in Cagliari, Italy Keynote.
• The 43th Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2019)”, September 09 - 11, 2019 Perugia, Italy.
• The 2th International Conference on Stochastic Processes and Algebraic Structures (SPAS2019) September 30 - October 02, 2019 Vasteras, Sweden, Keynote.
• Workshop on “Quantitative Methods for Intangibles Evaluation” December, 13, 2019 Ancona, Italy, Invited talk.

2018:

• The 5th Stochastic Modeling Techniques and Data Analysis Conference (SMTDA 2018) Conference, 12-15 June 2018, Chania, Greece
• The XLII Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2018)”, September 13-15, 2017 Napoli, Italy.
• International Conference DEPCOS2018, Brunow, Poland, 02 - 06 July 2018
• 9th International Workshop on Applied Probability, Budapest, Hungary, 18th - 21th June 2018
• Workshop STODEP2018, Rouen, France, October 3-5, 2018

2017:

• The 17th Applied Stochastic Models and data Analysis Conference (AMASES 2017) Conference, June 06 - 09, 2017 London, UK
• The XLI Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2017)”, September 14-16, 2017 Cagliari, Italy.

• The International Conference on Stochastic Processes and Algebraic Structures (SPAS2017) October 04 - 06, 2017 Vasteras-Stockholm, Sweden.
• Seminar, Università del Salento, Dipartimento di Scienze dell'Economia, October 18 2017, Lecce, Italy.

2016:
• The 4th Stochastic Modeling Techniques and Data Analysis Conference (SMTDA 2016) Conference, 01-04 June 2016, La Valletta, Malta.
• Eighth International Workshop on Applied Probability (IWAP2016), June 20 - 23, 2016 Toronto, Canada.
• International Workshop on Computational Economics and Econometrics (Iwcee16) June 30 – July 01, Keynote.
• The XL Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2016)", September 15-17 2016 Catania, Italy.

2015:
• The XVI Applied Stochastic Models and Data Analysis Conference (ASMDA 2015)", Pireus, Greece 30th June - 04th July 2015
• Seminar, Université de Reims Champagne-Ardenne, Laboratoires de Mathématiques, May 21 2015, Reims, France.

2014:
• "The VI International Conference on Mathematical and Statistical Methods for Actuarial Sciences and Finance (MAF 2014)", April 22 - 24 2014 Vietri sul Mare, Italy.
• "The III Stochastic Modeling Techniques and Data Analysis Conference (SMTDA 2014)", June 10-14 2014 Lisbon, Portugal.
• "The XXXVIII Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2014)", Università Mediterranea di Reggio Calabria, September 04 - 06 2014 Reggio di Calabria, Italy.

2013:
• "The XV Applied Stochastic Models and Data Analysis Conference (ASMDA 2013)", June 25 - 28 2013, Mataró (Barcelona), Spain.
• "The XXXVII Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2013)", Università dell'Insubria, Stresa (Verbania), Italy.
• "International Cramér Symposium on Insurance Mathematics" Stockholm, Sweden.

2012:
• "The II Stochastic Modeling Techniques and Data Analysis Conference (SMTDA 2012)", Chania, Greece.
• "European Geophisical Union, General Assembly (EGU 2012)", Vienna, Austria.
• "The XXXVI Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2012)", Università degli Studi di Foggia, Vieste, Italy.
• "Probability Theory and its Applications", Moscow, Russian.

• “Seminar: Groupe de travail en Statistique”, Université de Rouen, Laboratoire de Mathematiques Raphael Salem, May 11, 2012, Rouen, France
• “Seminar, Université de Caen - Basse Normandie, Laboratoire de Mathématiques Nicolas Oresme, March 12, 2012, Caen, France.

2011:
• “The XIV Applied Stochastic Models and Data Analysis Conference (ASMDA 2011)", University “La Sapienza” of Rome, Rome, (Italy).
• “The XXXIIV Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2011)”, Università degli Studi di Pisa, Italy.
• “Markov & semi-Markov Processes & Related Fields (MSMPRF 2011)”, Chalkidiki, Greece.
• “Seminar: Groupe de travail en Statistique”, Université de Rouen, Laboratoire de Mathematiques Raphael Salem, November 03, 2011, Rouen, France
• “Seminar: Entropie, mots, stat”, Université de Caen - Basse Normandie, Laboratoire de Mathématiques Nicolas Oresme, November 9, 2011, Caen, France.

2010:
• “V International Workshop on Applied Probability (IWAP 2010)” Universidad Carlos III de Madrid, Colmenarejo, Madrid, Spain.
• “Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA 2010)”, Chania, Greece.
• “Fourth International Conference Mathematical and Statistical Methods for Actuarial Sciences and Finance (MAF 2010)”, Ravello, Italy.
• “The International Symposium on Stochastic Models in Reliability Engineering, Life Sciences and Operations Management (SMRLO 2010)”, Shamoon College of Engineering, Beer Sheva, Israel.
• “The XXXIIII Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2010)”, Università degli Studi di Macerata, Macerata, Italy.

2009:
• “The XIII Applied Stochastic Models and Data Analysis Conference (ASMDA 2009)", Vilnius Gediminas Technical University, Vilnius (Lithuania).
• “Seminar: Strategy and Stochastics”, University LUISS, Roma, Italy
• “The XXXII Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2009)”, Università degli Studi di Parma, Parma, Italy.
• “III International Symposium on Semi-Markov Processes Theory and Applications 2009”, Università degli Studi di Cagliari, Cagliari, Italy.

2008:
• “IV International Workshop on Applied Probability (IWAP 2008)”, Université de Technologie de Compiegne, France
• “Seminar: Networks, Topology and Dynamics”, University Bicocca, Milano (Italy)
• “The XXXI Congress of the Italian Association of Mathematics Applied to Economic and

Social Sciences (AMASES 2008)", Università degli Studi di Trento, Trento, Italy.
• "X Spanish-Italian Congress of Financial and Actuarial Mathematics 2008", Università degli Studi di Cagliari, Cagliari, Italy.

2007:
• "The XII Applied Stochastic Models and Data Analysis Conference (ASMDA 2007)", Chania (Greece).
• "The XXX Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2007)", Università degli Studi del Salento, Lecce, Italy.

2006:
• "III International Workshop on Applied Probability (IWAP 2006)", University of Connecticut, Storrs, Connecticut, USA.
• "The XXX Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2006)", Università degli Studi di Trieste, Trieste, Italy.

2005:
• "The XI Applied Stochastic Models and Data Analysis Conference (ASMDA 2005)", Université de Bretagne Occidentale, Brest, France.
• "The XXIX Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2005)", Università degli Studi di Palermo, Palermo, Italy.
• "VII Spanish-Italian Congress of Financial and Actuarial Mathematics 2005", Verbania, Italy.

2004:
• "The XXXIV Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2004)", Università degli Studi di Modena e Reggio Emilia, Modena, Italy.
• "8-th International *Congress* on *Insurance*: *Mathematics* & *Economics (IME2004)"*, University LUISS, Roma, Italy

2003:
• "The XXXVIII Congress of the Italian Association of Mathematics Applied to Economic and Social Sciences (AMASES 2003)", Università degli Studi di Cagliari, Cagliari, Italy.

Conferences and Symposia organization
2019: Member of the Scientific Committee of the "XVIII Applied Stochastic Models and Data Analysis (ASMDA 2019) International Conference", Firenze, Italy.

2018: Member of the Scientific Committee of the "5th Stochastic Modeling Techniques and Data Analysis (SMTDA 2016) International Conference ", Chania, Greece.

2017: Member of the Scientific Committee of the "XVII Applied Stochastic Models and Data Analysis (ASMDA 2017) International Conference", Pireus, Greece.

2016: Member of the Scientific Committee of the "4rd Stochastic Modeling Techniques and Data Analysis (SMTDA 2016) International Conference ", La Valletta, Malta.

2015: Member of the Scientific Committee of the "XVI Applied Stochastic Models and Data Analysis (ASMDA 2015) International Conference ", Pireus, Greece.

2014:
- Member of the Scientific Committee of the "3rd Stochastic Modeling Techniques and Data Analysis (SMTDA 2014) International Conference ", Lisbon, Portugal.
- Organizer of the special session "Stochastic Models for Insurance and Energy" at "The III Stochastic Modeling Techniques and Data Analysis Conference (SMTDA 2014)", June 10-14 2014 Lisbon, Portugal.

2013:
- Member of the Scientific Committee of the "XV Applied Stochastic Models and Data Analysis (ASMDA 2013) International Conference ", Matarò (Barcelona) Spain.
- Co-organizer of the special session "Risk Models and Applications" at the International Cramér Symposium on Insurance Mathematics, June 11 – 14, 2013, Stockholm.
- Co-organizer of the special session "Markov and Semi-Markov Risk Models" at the International Cramér Symposium on Insurance Mathematics, June 11 – 14, 2013, Stockholm.
- Organizer of the special session "Semi-Markovian based models for finance, insurance and economics" at the "The XV Applied Stochastic Models and Data Analysis Conference (ASMDA 2013)", June 25 - 28 2013, Mataró (Barcelona), Spain.

2012:
- Organizer of the special session "Financial and Actuarial Models" at "The II Stochastic Modeling Techniques and Data Analysis Conference (SMTDA 2012)", Chania, Greece.

2011:
- Member of the Organizing and Scientific Committees, "XIV Applied Stochastic Models and Data Analysis (ASMDA 2011) International Conference ", Rome (Italy).

2009:
- Member of the Organizing and Scientific Committees, "III International Symposium on Semi-Markov Models - Theory & Applications", Cagliari (Italy).

Collaborations with research institutions
- Université de Rouen, France (Prof. Vlad Stefan Barbu)
- Université de Reims Champagne-Ardenne, France (Prof. Philippe Regnault)
- Université de Caen, France (Prof. Valerie Girardin)
- Universitat de Barcelona, Spain (Prof. Montserrat Guillen)
- University of Stockolm, Sweden (Prof. Dmitrii Silvestrov)
- Université Libre de Bruxelles, Belgium (Prof. Jacques Janssen)

- Bialystok University of Technology, Poland (Dr. Robert Adam Sobolewski)
- National Academy of Sciences of Ukraine (Prof. Vladimir S. Koroliuk)
- Università “La Sapienza” di Roma, Italy (Prof. Raimondo Manca)
- Università degli studi di Cagliari, Italy (Dr. Giovanni Masala)
- Università Politecnica delle Marche, Italy (Prof. Filippo Petroni)
- Università degli studi “Guglielmo Marconi”, Italy (Prof. Fulvio Gismondi)
- Indian Institute of Technology Delhi, India (Prof. S. Dharmaraja)

Reviewing
Ad hoc referee for journals:
Insurance: Mathematics and Economics; Communications in Statistics: Theory and Methods; Methodology and Computing in Applied Probability; Computational Economics; Physica A: statistical mechanics and its applications; Applied Stochastic Models in Business and Industry; Economic Modelling; Journal of Nonparametric Statistics; Linear Algebra and its Applications; Statistics and Operations Research Transactions; Journal of the Operational Research Society; Journal of Applied Statistics; IIE Transactions; Fuzzy Sets and Systems; IEEE Transactions on Reliability; Symbiosis Open Access Journal of Aids Research; Annals of Finance; Risks; Reliability Engineering and System Safety; Journal of Risk Finance; IMA Journal of Management Mathematics; Statistica Neerlandica; Applied and Computational Mathematics, Applied and Soft Computing, Mathematics, European Journal of Actuarial Sciences, International Journal of Finance and Economics, Hacettepe Journal of Mathematics and Statistics

Reviewing for Archives
Mathematical Reviews;

PROFESSIONAL MEMBERSHIPS
Member of the A.M.A.S.E.S. (The Italian Association of Mathematics Applied to Economic and Social Sciences), since 2003.

Member of the UMI (Unione Matematica Italiana), since 2020

Member of the UMI’s group “PRISMA” (Probability In Statistics, Mathematics and Applications), since 2020

LANGUAGES
Italian, English, French.

Dichiarazione sostitutiva di certificazioni/dell'atto di notorietà
(Artt. 46 e 47 del D.P.R. 28 dicembre 2000, n. 445)

Il sottoscritto Guglielmo D'Amico, nato a Castel di Sangro (AQ) il 31/12/1976, residente in Quadri Via Benedetto Croce n. 153, a conoscenza di quanto prescritto dall'art. 76 del D.P.R. 28 dicembre 2000 n. 445, sulla responsabilità penale cui può andare incontro in caso di falsità in atti e di dichiarazioni mendaci, nonché di quanto prescritto dall'art. 75 del D.P.R. 28 dicembre 2000 n. 445, sulla decadenza dai benefici eventualmente conseguenti al provvedimento emanato sulla base di dichiarazioni non veritiere, ai sensi e per gli effetti del citato D.P.R. n. 445/2000 e sotto la propria personale responsabilità:

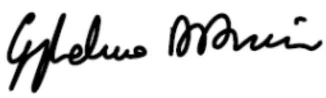
D I C H I A R A

che tutte le informazioni contenute nel proprio curriculum vitae sono veritiere.

Letto, confermato e sottoscritto.

Chieti, lì 31 Gennaio 2020

il dichiarante



Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base art. 13 del D. Lgs. 196/2003.