GIULIA ROTUNDO
Curriculum Vitae

Rome, September 6th, 2022

Part I – General Information

Full Name	Giulia Rotundo
Citizenship	Italian
E-mail	giulia.rotundo@uniroma1.it
Spoken Languages	Italian, English
Present position	Full professor at Sapienza University of Rome, Department of Statistical Sciences, Faculty of Information Engineering, Informatics, and Statistics. S.S.D. SECS-S/06 – Metodi matematici dell’economia e delle scienze attuariali e finanziarie (Area CUN S.C. 13/D4)

Part II – Education

Type	Year	Institution	Notes
University graduation	1992	Sapienza University of Rome	Master degree in Mathematics (110/110)
Post-graduate studies	1993	Sapienza University of Rome	Specialization in Cognitive psychology and neural networks
University graduation	1997	Sapienza University of Rome	Master degree in Computer science (110/110 cum laude)

Part III – Appointments

Part IIIa – Main Academic Appointments

Start	End	Institution	Position
1996	1996	National Research Council, Istituto per le Applicazioni del Calcolo “Mauro Picone”, Rome	Research grant
1996	2001	Department of Mathematics for Decisions in Economics, Finance, and Insurances, Faculty of Economics, Sapienza University of Rome	Researcher
2001	2012	Department of Economics and Business, Faculty of Economics, University of Tuscia, Viterbo (IT)	Associate professor
2012	2017	Department of Methods and Models for Economics, Territory, and Finance, Faculty of Economics, Sapienza University of Rome	Associate professor
2017	2021	Department of Statistical Sciences, Faculty of Information Engineering,	Associate professor

		Informatics, and Statistics, Sapienza University of Rome	
2021	-	Department of Statistical Sciences, Faculty of Information Engineering, Informatics, and Statistics, Sapienza University of Rome	Full professor

Part IIIb – Other Academic Appointments

Start	End	Institution	Position
2019	-	Faculty of Information Engineering, Informatics, and Statistics, Sapienza University of Rome – CAD "Scienze statistiche, attuariali e finanziarie"	Reference professor for the Degree in Statistics, Economics, Finance, and Insurances (SEFA)
2019	-	Faculty of Information Engineering, Informatics, and Statistics, Sapienza University of Rome	Academic Reference for international Mobility (RAM) for the Degree in Statistics, Economics, Finance, and Insurances (SEFA)
2019	-	Faculty of Information Engineering, Informatics, and Statistics, Sapienza University of Rome	Member of the committee for the test of Italian language for foreign students enrolling in Sapienza courses
2017	-	Sapienza University of Rome	Member of the Committee of the Ph.D. School of Statistical Sciences
2019	2019	Faculty of Information Engineering, Informatics, and Statistics, Sapienza University of Rome	Committee for the entry level test (TOLC)
2019	2019	Faculty of Information Engineering, Informatics, and Statistics, Sapienza University of Rome	Team for Monitoring the quality of the courses 2019 (SEFA)
2018	2019	Faculty of Economics, Sapienza University of Rome	Tutor for the 1st year undergraduate students (LT)
2016	2018	Faculty of Economics, Sapienza University of Rome – CAD "Economia" (LT)	Reference professor for the Degree in "Management e diritto d'impresa"
2003	2018	University of Tuscia, Viterbo (IT) and Sapienza University of Rome	Reference professor for Erasmus agreements (Nice, Zurich, Jerusalem)
2017	2017	NUI Galway	Member of the Committee for the PhD thesis defense
2017;2021	2017; 2021	Paris I Pantheon Sorbonne, Paris (FR)	Member of the Committee for the PhD thesis defense
2014	2017	Department of Methods and Models for Economics, Territory, and	Member of the Research Committee and of the Publications Committee

		Finance, Faculty of Economics, Sapienza University of Rome	
2015	2017	PhD School of Economics, Faculty of Economics, Sapienza University of Rome	Tutor of the PhD student Matteo Serri
2015	2016	Faculty of Economics, Sapienza University of Rome	Member of committees for the selection of tutors (undergraduate courses)
2005	2017	PhD School of Economics, Faculty of Economics, Sapienza University of Rome	Member of the Committee of the Ph.D. School of Economics
2011	2011	Faculty of Economics, University of Sannio, Cassino (IT)	Member of the Committee for the PhD thesis defense
2009	2009	Faculty of Economics, University of Tuscia, Viterbo (IT)	Substitute of the Dean for the degree program on 'Banking and Finance'
2009	2009	DCU Dublin, School of Computing (IE)	Member of the Committee for the PhD thesis defense
2007	2007	PhD School of Economics, Faculty of Economics, Sapienza University of Rome	Member of the Committee for the PhD entrance exam
2004	2004	PhD in "Matematica per le applicazioni economico-finanziarie", Faculty of Economics, Sapienza University of Rome (XIV cycle)	Member of the Committee for the PhD thesis defenses
2001	2001	PhD in "Matematica per le applicazioni economico-finanziarie", Faculty of Economics, Sapienza University of Rome (XII cycle)	Member of the Committee for the PhD thesis defense
2001	2001	University of Piemonte orientale, Vercelli (IT)	Member of the Committee for a permanent position of Assistant Professor (Ricercatore Universitario)

Part IIIc – Other Appointments

Start	End	Institution	Position
2012	2020	FWO (Research Foundation-Flanders) (BE)	Member of the International committee for interdisciplinary projects (2012-2018)/Cross-Domain Panel (2019-2020)
2014	2019	Ministerial office for University, Education, and Research (MIUR), Uff. III "Direzione generale per l'internazionalizzazione della ricerca" , and, later, Uff. VIII "Direzione Generale per il coordinamento, la promozione e la valorizzazione della ricerca" (IT)	COST Italian representative in the Council of Senior Officials (major decision body of COST, in a panel including one member for each country)

2010	2019	Ministerial office for University, Education, and Research (MIUR), Uff. III "Direzione generale per l'internazionalizzazione della ricerca", and, later, Uff. VIII "Direzione Generale per il coordinamento, la promozione e la valorizzazione della ricerca" (IT)	COST (European funding programme/association 'COoperation in Science and Technology') Substitute of the Italian National Coordinator (at the national level, through all the scientific sectors)

Part IV – Teaching experience

Part IVa - Teaching in Italy (S.S.D. SECS-S/06 apart from "Matematica 1")

Bachelor's degree ("Triennale"**)**

Year (a.a.)	Institution	Lecture/Course
2019-	Department of Statistical Sciences, Sapienza University of Rome	Matematica 1 (Linear Algebra)
2017-	Department of Statistical Sciences, Sapienza University of Rome	Modelli per i mercati finanziari (SEFA)
2018-19	Department of Statistical Sciences, Sapienza University of Rome	Laboratorio di matematica finanziaria (SEFA)
2013-2018	Faculty of Economics, Sapienza University of Rome	Matematica corso base
2013	Faculty of Economics, Sapienza University of Rome	Matematica finanziaria e sistemi di equazioni differenziali (seminar series related to the course of Mathematical methods for economics and finance)
2010-2012	Department of Economics and Business, University of Tuscia, Viterbo (IT)	Metodi quantitativi per l'economia e la finanza
2009	Department of Economics and Business, University of Tuscia, Viterbo (IT)	Matematica finanziaria
2001-2007; 2009	Department of Economics and Business, University of Tuscia, Viterbo (IT)	Matematica generale; complementi di matematica
2006-2007	Faculty of Economics, LUISS, Rome (IT)	Matematica generale
2001-2006	Faculty of Economics, Sapienza University of Rome (IT)	Matematica generale; complementi di matematica generale
2002-2005	Department of Economics and Business, University of Tuscia, Viterbo (IT)	Introduzione ai processi stocastici della finanza
1996-2001	Faculty of Economics, Sapienza University of Rome (IT)	Short course on Neural networks in the framework of the course of "Elaborazione

		Automatica dei Dati per le Decisioni Economiche e Finanziarie”
1993-2001	Faculty of Economics, Sapienza University of Rome (IT)	Matematica per le applicazioni economiche e finanziarie (teaching assistant)

Master’s degree

Year (a.a.)	Institution	Lecture/Course
2019	Department of Statistical Sciences, Sapienza University of Rome	Financial Risk management (EN language, SAF)
2019-	Department of Statistical Sciences, Sapienza University of Rome	Laboratory of quantitative finance (EN language, SAF)
2011-12	Department of Economics and Business, University of Tuscia, Viterbo (IT)	Modelli matematici per l’economia e la finanza
2009	Department of Economics and Business, University of Tuscia, Viterbo (IT)	Ottimizzazione in economia e finanza
2008	Department of Economics and Business, University of Tuscia, Viterbo (IT)	Ricerca operativa
2007-2008	Department of Economics and Business, University of Tuscia, Viterbo (IT)	Finanza quantitativa e computazionale

PhD

Year (a.a.)	Institution	Lecture/Course
2019	Department of Statistical Sciences, Sapienza University of Rome	Complex networks (short course for the PhD School of Statistical Sciences)
2016-2017	Faculty of Economics, Sapienza University of Rome	Mathematics (EN language)
1996-2001	Faculty of Economics, Sapienza University of Rome	Matematica per le applicazioni economico-finanziarie

Part IVb - Teaching abroad (EN language)

Year (a.a.)	Institution	Lecture/Course
2019	Université Paris I-Pantheon-Sorbonne, Francia	Complex networks analysis (short course mandatory for the students in Finance)
2007; 2011; 2012	University of Nice (FR)	Within the ERASMUS program
2008	University of Liege (BE)	Within the ERASMUS program

Part V - Society memberberships

Year	Title
1995-	U.M.I. (Italian Mathematical Society)

2008-	INdAM/GNFM (Istituto Nazionale di Alta Matematica/Gruppo Nazionale di Fisica Matematica)
2000-2017	A.M.A.S.E.S. (Association for the applications of mathematics to economic and social sciences)
2006-2013	IEEE (Senior member) – CIS (Computational Intelligence Society); WIE (Women in Engineering)

Part VI – Funding information
(*) Investigator with voting rights on the scientific governance and on the approval of the yearly budget/activities

International

Year	Title	Program	Grant value
2019-	(*) Management Committee Member Substitute in the COST Action CA18232 "Mathematical models for interacting dynamics on networks". Chairwoman: Marjeta Kramar-Fijavz	COST	Approx. 130000eur/year
2012-2017	(*) Member of the Steering Committee, Management Committee, and, moreover, "Outreach and new trends" officer of the European project COST Action TD1210 "Analyzing the dynamics of information and knowledge landscapes" (KNOWeSCAPE). Chairwoman: Andrea Scharnhorst	COST	Approx. 130000eur/year
2012-2016	(*) Management committee member substitute in the Management Committee of European project COST Action IC1205 "Computational Social Choice". Chairman: Ulle Endriss	COST	Approx. 130000eur/year
2012-2016	I-WG "New trends" of the European project COST Action IS1104 "The EU in the new complex geography of economic systems: models, tools and policy evaluation" (GECOMPLEXITY). Chairman: Pasquale Commendatore.	COST	Approx. 130000eur/year
2008-2013	(*) Member of the Managing Committee of the European project COST Action MP0801 "Physics of Competition and Conflicts". Chairman: Peter Richmond	COST	Approx. 130000eur/year

National

2020-	PI- Atheneum project “Sustainability and ESG: risk drivers and corporate profitability”	Sapienza University of Rome	10000eur
2019-	I– Atheneum project “New issues in systemic risk management” (PI: Prof.ssa Susanna Levantesi)	Sapienza University of Rome	39000eur
2018-2020	PI- Atheneum project "Sostenere la diffusione dell’innovazione: SME ed efficienza energetica"	Sapienza University of Rome	1500 eur
2017 and 2019 (postponed due to COVID-19)	Proposer of the invitation of a professor (visiting professor. J.Vitting-Andersen)	Sapienza University of Rome	18000 eur
2015	Proposer of the invitation of a professor (visiting professor: S. Raghavendra)	Sapienza University of Rome	9000eur
2014-2017	PI - Atheneum project “Indicatori e modelli per l’analisi della concentrazione nei mercati finanziari”	Sapienza University of Rome	7000eur
2013-2016	PI - Atheneum project “Stabilità nei mercati finanziari: analisi, modelli ed algoritmi”	Sapienza University of Rome	7000eur
2015-2017	I- Atheneum project “La selezione di portafoglio: ottimizzazione, diversificazione e valutazione delle performance” (PI: Prof. F. Tardella)	Sapienza University of Rome	7000eur
2006-2008	I- Atheneum project “Metodi di ottimizzazione e controllo per la gestione del debito pubblico; modelli statici e dinamici” (PI: Prof. B. Simeone)	Sapienza University of Rome	7000eur
2003	Director of a research fellowship: “Modelli matematici per l’economia e la finanza”	University of Tuscia	Approx. 18000 eur
2000-2008	Research projects MURST 60% (yearly projects, PI)	Ministry for University and of Scientific and Technological Research	Approx. 10000 eur

Part VII – Research Activities

Part VIIa – Research Topics

Keywords **Brief Description**

Complex networks Financial networks	"Complex networks" is a subject increasing its relevance in the field of "Network sciences" since 2000. The methods proposed in the Complex network framework allow to model binary and group (cluster) relationship and ranking, with a consequent refinement of models from Finance. The selected publications concern the analysis and the modelization of risk due to the presence of interconnections. In details, the ones on the shareholding networks focus on concentration and control in financial markets and on the stochastic dependence among integration and diversification which leads to the maximum/minimum of concentration [1,6,12]. Copulas are introduced for obtaining general results depending on the network topology. The publications focusing on international stock markets model the dynamics of contagions including features of behavioural finance [5,8,15]. The recent applications to pension funds and mutual funds consider the relevance of the network structure for clustering and herding [3,4], and serve for evidencing features of active/passive style management for institutional portfolios [10].
Long term memory	The presence of long term memory is intended as a slow decay in correlations, which, in turn, changes the global response to endogenous and exogenous shocks. Paper [11] analyses the composition of the market. In [2] we introduce a new temperature index, which can suitably represent the underlying of weather derivatives. In [7] we state the conditions for the replicas of portfolios of a reference commodity and we validate the theoretical setting through empirical data on WTI, Brent, and Dubai oils.
Agent based models	Paper [11] gets the results on long term memory as outcome of the aggregation of agents in the market. Theoretical results have been obtained in previous publications.
Time series analysis in social models	Paper [9] considers an analysis of seasonality and statistical validation of the birth rate data. Paper [13] shows an approach to complex-valued information entropy measure for networks with directed links, with application to citations by community agents with opposite opinions. Paper [14] proposes a dynamical model of ideological interaction.

Part VIIb – Invited Research Visits
Visiting scientist at

Jan. 16th-Feb. 14th, 2019	Paris I Pantheon-Sorbonne (FR)
Feb. 5th-11th, 2015	GRAPES, Université de Liège (BE)
Jan. 29th-Feb. 5th, 2015	CEVIPOF, Paris (FR)
Mar. 28th- Apr. 4th, 2013 and Dec.12th-19th, 2013	Paris I Pantheon-Sorbonne (FR)
May 18th -25th, 2010 and Apr. 18th-24th, 2013	Bulgarian Academy of Sciences, Sofia (BG)
Feb. 18th-25th, and Mar. 11th-25th, 2013	University of Santiago de Compostela (ES)
Oct. 1st-15th, 2012	Universidad National de La Plata, La Plata (AR)
Jul. 14th-21st, 2011 and Jun. 22nd-30th, 2012	Royal Netherlands Academy of Arts and Sciences, Den Haag (NL)
Feb. 7th -14th, 2009	S.U.P.R.A.S., Université de Liège (BE)

Jan. 31st- Feb. 2nd; Sep. 18th-24th; Nov. 11th–18th, 2000	C.A.E.S.A.R. (Center of Advanced European Studies and Research), Bonn (DE)
Nov.13th-Dec. 12th, 1997	Ruhr-Universität, Bochum (DE)

Part VIIc – Communication of the Research Activities

Main organizer or co-organizer and member of the scientific committee/international advisory board of the following workshops/conferences

Sep. 14th-16th, 2021 (forthcoming)	COST Action CA 18232 "Mathematical models for interacting dynamics on networks" WG3&4+MC meetings, Department of Statistical Science, Rome (IT)
Jul. 8th-11th, 2018	New challenges in investment strategies, risk and financial modelling. Stream in the frame of the EURO2018 conference, Valencia (ES)
Jun. 20th-21st, 2018	Commodity and Energy Markets Association Annual Meeting 2018, Rome (IT)
Mar.14th-16th, 2017	Markets, flows, and behaviour, Galway (IE)
Jul. 3th-6th, 2016	Networks and contagions, Poznan (PL)
Sep. 16th-17th, 2015	On the diffusion of Financial literacy, Milan (IT)
Sep. 16th-18th, 2014	eGovernement and eKnowledge – wider societal use of knowledge maps,Seville (ES)
Dec. 8th -10th, 2010	Quantitative behavioural finance, Nice (FR)
May 27th -30th, 2009	NET2009 and 1st Annual Meeting COST Action MP0801 'Physics of Competition and Conflicts', Rome (IT)
Oct. 4st- 5th, 2007	Global versus local dynamics on networks; satellite of ECCS2007, Dresden (DE)
Aug.31st- Sep. 2nd, 2006	Prey-predator like systems and International conference for the management of risk factors in economically relevant human activities, Rome (IT)
Sep. 1st-3rd, 2005	International conference for the management of risk factors in economically relevant human activities, Viterbo (IT)

Member of the scientific committee/international advisory board of the following workshops/conferences

October 5th-7th, 2022	DYSES2022, Rouen (FR)
Oct. 9th -12th, 2018	DYSES2018, Paris (FR)
Feb. 22nd-24th, 2017	IV Annual Scientific Conference of the COST Action TD1210, Sofia (BG)
Oct, 6th-9th, 2015	III Annual Scientific Conference of the COST Action TD1210, Mons (BE)
Nov. 24th-26th, 2014	II Annual Scientific Conference of the COST Action TD1210, Thessaloniki (GR)
Jul. 4th-6th, 2013	NED2013 (Nonlinear Economic Dynamic), Siena (IT)
Oct. 1st-5th, 2012	DYSES (Dynamics of Social and Economic Systems), Ushuaia (AR)

Jul. 10th -11th , 2012	MedDecSup'2012 (International workshop on Next Generation Intelligent Medical Decision Support Systems), Tärgu Mures (RO)
Sep. 18th-19th, 2011	MedDecSup'2011 (International workshop on Next Generation Intelligent Medical Decision Support Systems), Tärgu Mures (RO)
May 31st, 2011	NET2011, Milan (IT)
Sep. 19th-25th, 2010	DYSES (Dynamics of Social and Economic Systems), Benevento (IT)
Sep. 12th-15th, 2010	MTISD2010 (Methods, Models and Information Technologies for Decision Support Systems), Pescara (IT)
Jun. 14th–Sep.16th, 2010	NET2010, Milan (IT)
Oct. 22nd-23rd, 2009	UICS (Understanding Intelligent and Complex Systems), Petru Maior University, Tärgu-Mures (RO)
Apr. 14th -18th, 2009	DYSES (Dynamics of Social and Economic Systems), Pinamar (AR)

Invited expert at the following workshops/conferences

Feb. 14th-16th, 2018	Final meeting of COST Action TU1305 "Social networks and travel behavior", University of Milano-Bicocca, Milan (IT)
Feb. 22nd-24th, 2017	IV Annual Scientific Conference of the COST Action TD1210, Sofia (BG)
Mar. 8th-11th, 2016	"II Workshop on Simulating the Social Processes of Science" KNOWeSCAPE meeting combined with "New frontiers in peer reviewing" PEERE meeting "Taking stock of peer review", Valencia (ES)
Oct. 6th-9th, 2015	III Annual Scientific Conference of the COST Action TD1210, Mons (BE)
Apr. 14st-16nd, 2015	"Computational social choice" COST IC1205 workshop "Fair Division and Matching", Glasgow (UK)
Apr. 21st-22nd, 2015	"New frontiers in peer reviewing" (PEERE) COST TD1306 workshop "Peer review: Past, Present, and Future", Zurich (CH)
Jan. 27th -29th, 2015	"New frontiers in peer reviewing" (PEERE) COST TD1306 workshop "Data sharing in peer review", Lisbon (PT)
Nov. 24th -26th, 2014	II Annual Scientific Conference of the COST Action TD1210, Thessaloniki (GR)
Apr. 23rd- 25th, 2014	"Ways of seeing", TD1210 workshop, Galway (IE)
Mar. 26th -28th, 2013	"The EU in the new complex geography of economic systems: models, tools and policy evaluation" COST IS1104 workshop, ISCTE-IUL, Lisbon (PT)
Sep. 18th-19th, 2012	I meeting of COST Action IS1104 workshop on "The EU in the new complex geography of economic systems: models, tools and policy evaluation", Urbino (IT)

Invited speaker (conferences/workshops, and seminars)

Feb. 24th-27th, 2020	Meeting of COST Action CA18232 "Social networks and travel behavior" workshop, University of Zagreb (HR). Talk title: "A copula approach to cross-shareholding networks". Chairwoman Marjeta Kramar Fijavz

Apr. 11th, 2019	Seminar at the University of Bologna (IT). Talk title: "Complex networks modeling for financial data"
Apr. 9th, 2019	Seminar at the University of Macerata (IT). Talk title: "Herding in mutual funds: a complex networks approach"
Jan. 23rd, 2019	Seminar at Paris I Pantheon-Sorbonne (FR). Talk title: "Complex network modeling for financial data"
Oct. 6th, 2017	Seminar at Paris I Pantheon-Sorbonne (FR). Talk title: "Portfolio overlapping and herding in mutual funds: threats to financial stability" (Part 2)
May 11th-12th, 2017	"Workshop on systemic risk" at Paris I Pantheon-Sorbonne (FR). Talk title: "Portfolio overlapping and herding in mutual funds: threats to financial stability" (Part 1) Chairmen: Philippe de Peretti, Jorgen Vitting Andersen.
Mar. 14th-16th, 2016	Workshop "Money, Uncertainty and the Macroeconomy" at NUI Galway (IE). Talk title: "Concentration in financial markets". Chairman: Srinivasan Raghavendra.
Nov. 18th-20th, 2015	"Making sense of education indicators" COST Action TD1210 workshop at DANS-KNAW, Amsterdam (NL). Talk title: "Financial literacy in Italy". Chairman: Christophe Gueret.
May 6th,-7th, 2015	Seminar at University of Milano-Bicocca, Milan (IT). Titles of the talks: "Bibliometric indicators in the evaluation of scientific research", "Financial applications of complex networks"
Feb. 12th, 2015	Seminar at University of Milano-Bicocca, Milan (IT). Talk title: "Dynamic consensus beliefs. On the usage of bibliometric indicators for scientific evaluations"
Jun. 27th-28th, 2013	International workshop on "Nonlinear dynamics, agent-based models, and complex evolving systems in economics", University of Bologna (IT). Talk title: "On aggregation techniques for agent based models: understanding the presence of long term memory", joint work with R. Cerqueti. Chairman: Roberto Dieci
Nov. 7th, 2012	Seminar at University of Milano-Bicocca, Milan (IT). Talk title: "Mutual funds relationship and risk analysis".
Oct. 1st-5th, 2012	DYSES conference Talk title: "Mutual funds relationship and risk analysis", joint work with A. M. D'Arcangelis. Chairwoman: Araceli Proto
Jun. 1st, 2012	Seminar at University of Milano-Bicocca, Milan (IT). Talk title: "Network analysis of the Italian Stock Market"
May 11th-13th, 2012	"Measuring science: modern bibliometric methods", COST-MP0801 workshop, Sofia (BG). Talk title: "Exercises on the evaluation of the quality of the research". Chairman: Oleg Yordanov
March 27th-29th, 2012	"Complexity - An Interdisciplinary Perspective", COST-MP0801 workshop, Jerusalem (IL). Talk title: "Network analysis of the Italian Stock Market", joint work with A. M. D'Arcangelis. Chairman: Sorin Solomon
Nov. 14th-16th, 2011	"Does Humans behave like Atoms?", COST-MP0801 workshop, Centre de Recherche en Épistémologie Appliquée (CREA), École

	Polytechnique et CNRS, Paris (FR). Talk title: "Have friends, not just contacts". Chairman: Serge Galam
May 31st, 2011	NET2011 workshop, Milan (IT). Talk title: "Network of firms: an analysis of the relevance of integrated ownership in market concentration", joint work with A. M. D'Arcangelis. Chairwomen: Silvana Stefani and Anna Torriero
May 24th-26th, 2011	NATO Advanced Workshop on "Use of Risk Analysis in Computer-Aided Persuasion" Antalya, Turkey. Keynote speaker. Talk title: "Centrality measures for shareholding networks". Chairman: Ekrem Duman
May 18th -20th, 2011	Third annual meeting on "Physics of competition and conflicts", EURANDOM, Eindhoven (NL). Talk title: "Principal Component Analysis of directed networks", joint work with M. Ausloos. Chairman: Christian Giardina
Oct. 2nd-7th, 2010	COST-ESF strategic workshop "Future Internet and Society: A Complex Systems Perspective", Acquafredda di Maratea (IT). Talk title: "Complex networks in symbolic images". Chairman: Filippo Menczer
Oct. 9th-10th, 2010	"Modelling knowledge dynamics"' workshop at DANS-KNAW, Amsterdam (NL). Talk title: "Measuring researchers?". Chairwoman: Andrea Scharnhorst
May 26 th-29th, 2010	Second annual meeting on "Physics of competition and conflicts" workshop, Burgas (BG). Talk title: "Symbolic images for an evolutionary model of boundedly rational consumers". Chairman: Viktor Urumov
Sep. 23rd, 2009	Seminar at the University of Rhode Island, Kingston, Rhode Island, US, upon invitation of Prof. Gordon Dash. Talk title: "Ownership and control in shareholding networks"
Jun. 9th -10th, 2009	Invited speaker to "Modelling Interdependencies between Technological and Human Systems under Crisis Scenarios", hold within the Zurich International Workshop on "Coping with Crises in Complex Socio-Economic Systems" at ETH Zurich (CH). Talk title: "Resilience of networks under source removal". Chairman: Vittorio Rosato
Apr. 14th-18th, 2009	IV workshop on dynamics of social and economic systems (DYSES), Buenos Aires (AR). Invited member of the advisory committee and invited speaker. Talk title: "Network analysis of ownership and control structure in the Italian Stock market". Chairwoman: Araceli Proto
Jul.16th, 2008	Seminar at "Dottorato in Analisi dei sistemi economici e sociali: impresa, istituzioni, territorio", Dipartimento di Analisi dei sistemi economici e sociali, University of Sannio (Benevento, IT), upon invitation of Massimo Squillante. Talk title: "Complex networks in finance: a case study"
Jan. 16th, 2008	First invited scientific conference at the Scuola Superiore, Udine University (IT). Talk title: "Random networks per le applicazioni economiche e finanziarie". Chairman: Livio Piccinini
Nov. 8th, 2004	"PreNikkei2004" meeting, Tokyo University, Tokyo (JP). Talk title: "Mean Reverting Patterns and the Fractional Brownian Motion". Invited speaker. Chairwoman: Mieko Tanaka-Yamewaki

Sep. 16th–18th, 2004	"Verhulst 200 on Chaos" workshop, Royal Military Academy, Bruxelles, Belgium. Talk title: "Logistic function in large financial crashes". Chairman: Marcel Ausloos
Dec. 2001	Seminar at the University of Siena (IT). Talk title: "Dimensione di correlazione e sue applicazioni per la modellizzazione di dati finanziari."
May 25th-26th, 2001	University of Tuscia, Viterbo (IT). Workshop "Sviluppi della finanza matematica tra teoria e tecnica di mercato". Invited speaker. Talk title: "Reti neurali per previsioni finanziarie".
Nov. 1998	Seminar at Dipartimento di Matematica per le Decisioni, University of Florence (IT). Talk title: "Introduzione alle reti neurali ed applicazioni all'economia ed alla finanza"
Nov. 1st–8th, 1997	In the 1992-1997 CIAR-ESEP (Canadian Institute for Advanced Research - System Evolution Program) research project framework I participated as invited speaker to the group meeting in Ottawa, Canada, where I presented the results of the Italian group, later completed and collected into the paper: G. Cimino, G. Del Duce, L. Kadonaga, G. Rotundo, A. Sisani, G. Stabile, B. Tirozzi, M. Whiticar, "Time series analisys of geological data", Chemical Geology, vol. 161 (nos.1-3) ISSN 0009-2541, 30 September 1999, Special Issue "Earth System Evolution: Geochemical Perspective", pp. 253-270

Speaker at conferences and workshops

Nov.14th-15th, 2019	NET2019, Milan (IT). Talk title: "A copula approach to concentration and control in the weighted cross-shareholding complex networks"
Jun. 23rd -26th, 2019	EURO2019 conference, UCD Dublin (IE). Talk title: "A copula approach to integration and diversification in financial markets"
Oct. 9th -12th, 2018	DYSES, Paris (FR). Talk title: "Herding of European stock mutual funds. A network approach"
Dec. 8th-9th, 2016	NET2016, Trento (IT). Paper presented: "Intertemporal analysis of mutual funds investing in European stocks: the analysis of herding through centrality measures", joint work with A. M. D'Arcangelis
Jul. 14st-16nd, 2015	EURO XXVII, Glasgow (UK). Talk title: "Concentration in financial networks"
Nov. 8th-9th, 2012	NET2012, Trento (IT). Paper presented: "Mutual funds relationship and risk analysis", joint work with A. M. D'Arcangelis
Oct.1st-5th, 2012	DYSES2012 (Dynamics of Socio-Economic Systems), Ushuaia, Tierra del Fuego (AR). Paper presented: "Mutual funds relationship and risk analysis", joint work with A. M. D'Arcangelis
Sep. 27th-29th, 2009	ENCS'2009 – International Symposium on Engineered and Natural Complex Systems: Modeling, Simulation & Analysis, Toronto (CA), hold in the framework of "IEEE Toronto International Conference - Science and Technology for Humanity". Chair: Anna T. Lawniczak (University of Guelph (CA)). Paper presented: "Network of firms: an analysis of the relevance of integrated ownership in market concentration", joint work with A. M. D'Arcangelis

Mar. 1st- 6th, 2009	Application of Physics in Financial Analysis (APFA7) conference, Tokyo (JP). Paper presented: "Ownership and control in shareholding networks", joint work with A. M. D'Arcangelis
Oct. 9th-11th, 2008	1st ICC Conference on Network Modelling and Economic Systems (ICC2008–MES), Lisbon (PT). Paper presented: "Network of firms: an analysis of integrated ownership", joint work with A. M. D'Arcangelis
Jun. 12th-14th, 2008	NET2008, Trento (IT). Paper presented: "Ownership, control and hierarchical structures in networks of firms", joint work with A. M. D'Arcangelis
Apr. 9th-11th, 2008	2nd Workshop Bridging Mathematics, Natural Sciences, Social Sciences, and Finance, International University of Monaco (MC). Talk title: "Discrete decision support systems"
Jul. 2nd–6th, 2007	Application of Physics in Financial Analysis 6 (APFA6) conference, Lisbon (PT). Paper presented: "Effectiveness of measures of performance during speculative bubbles", joint work with F. Petroni
May18th-19th, 2007	Networks 2007, Urbino (IT). Paper presented: "Co-evolutive models for firms dynamics", joint work with A. Scozzari
Oct. 11th-13th, 2007	Metodi Matematici e Statistici per le Assicurazioni e la Finanza (MAF), Salerno (IT). Paper presented: "Dynamics of financial time series in an inhomogeneous aggregation frameworks", joint work with R. Cerqueti
June 29th– July 2nd, 2006	Application of Physics in Financial Analysis 5 (APFA5) conference, Torino (IT). Paper presented: "On the maximum drawdown during speculative bubbles", joint work with M. Navarra
May 17th-21st, 2006	Complexity, Aix-en-Provence (FR). Paper presented: "Microeconomic model switching in bubble dynamic"
Nov. 9th, 2005	Machine learning in finance workshop of the "Neural Processing Information System" conference, Vancouver (CA). Paper presented: "Neural networks for option pricing formula approximation", joint work with M. Navarra
Nov. 17th-18th, 2005	Connectionist Approaches in Economics and Management (ACSEG2005), Aix-en-Provence (FR). Paper presented: "A coevolution model for technical analysis signals"
Oct. 6th- 8th, 2005	New Mathematical Methods in Risk Theory, Firenze (IT). Paper presented: "Contribution defined pension funds and financial crashes: evaluation of naïve investment and contribution strategies", joint work with E. Mattioni
Sep. 8th–12th, 2005	XXIX A.M.A.S.E.S. (Associazione per la Matematica Applicata alle Scienze Economiche e Sociali) conference, Palermo (IT). Paper presented: "Options with underlying asset driven by a fractional brownian motion: crossing barriers estimates", joint work with R. Cerqueti
Jul. 27th– 31st, 2005	Fourth International Workshop on Computational Intelligence in Economics and Finance (CIEF'2005), hold into the framework of the "Eighth Joint Conference on Information Sciences" (JCIS 2005), Salt Lake City, UTAH (US). Paper presented: "Options with underlying asset driven by a fractional brownian motion: crossing barriers estimates", pp.1072-1075 of the abstract booklet, joint work with R. Cerqueti

Jun. 13th- 15th, 2005	10th Annual Workshop on Economic Heterogeneous Interacting Agents (WEHIA 2005), University of Essex, Colchester (UK). Paper presented: "A microeconomic model for financial signal technical analysis". Presented also at the conference ACSEG, Nov. 17 th -18th, 2005, Aix-en-Provence (FR)
Nov. 9th -11th, 2004	The Third Nikkei Econophysics Research Workshop and Symposium, Tokyo (JP). Paper presented: "The Hurst's exponent in technical analysis signals"
Nov. 13th–15th, 2003	Application of Physics in Financial Analysis 4 (APFA4) conference, Warsaw (PL). European Physical Society - Statistical and Nonlinear Physics Division. Paper presented: "Neural Networks for large financial crashes' forecast"
Sep. 3rd –6th, 2003	XXVII A.M.A.S.E.S. conference, Cagliari (IT). Paper presented: "Analisi di un mercato in presenza di market maker", joint work with R. Cerqueti
Mar. 20th– 23rd, 2003	C.I.F.E.'r (2003 IEEE International Conference on Computational Intelligence for Financial Engineering), Hong Kong (HK), IEEE Neural Network Society, organised by the "The Financial Engineering Technical Committee". Paper presented: "Microeconomic modeling of financial time series with long term memory", joint work with R. Cerqueti
Sept. 11th–14th, 2002	XXVI A.M.A.S.E.S. conference, Verona (IT). Paper presented: "Microeconomic modeling of financial time series with long term memory", joint work with R. Cerqueti
Sep. 5th–8th, 2001	XXV A.M.A.S.E.S. conference, Firenze (IT). Paper presented: "Analisi di un mercato in presenza di un market maker", joint work with R. Cerqueti
Feb. 1st–2nd, 2001	Workshop di Finanza Matematica, Pisa (IT). Paper presented: "A statistical mechanics approach to portfolio selection", joint work with B. Tirozzi
Jul. 13th–15th, 1999	APFA2 (Application of Physics in Financial Analysis) conference, Liege (BE). Papers presented: "A truncated Lévy approach for an Italian share", "Distinguishing between chaotic and stochastic systems in financial time series" and "A statistical mechanics approach to portfolio selection", joint work with B. Tirozzi, P. Paolillo
Jan. 28th–29th, 1999	Workshop di Matematica Finanziaria, Pescara (IT). Paper presented: "Distinguishing between chaotic and stochastic systems in financial time series", joint work with B. Tirozzi, M. Menna
Sep. 7th–11th, 1999	XXIII A.M.A.S.E.S. conference, Rende (IT). Paper presented: "Reti neurali e longevity risk", joint work with M. Micocci, and "Trasformazione di disequazioni variazionali in disequazioni variazionali partizionabili mediante reti neurali"
Jul. 15th-18th, 1999	Application of Physics in Financial Analysis (APFA), Dublin (IE). Paper presented: "A diffusion approach to economic time series", joint work with B. Tirozzi, M. Ciogli and "Hedging strategy with Langevin evolution", joint work with B. Tirozzi, S. Mariani
Jul. 27th–31st, 1998	APL98 conference, Rome (IT). Paper presented: "Neural Networks for Partitionable Variational Inequalities"

Apr. 22^{nd}-24^{th}, 1998	ESANN (European Symposium on Neural Networks) conference, Bruges (BE). Paper presented: "Neural networks for financial forecast".

Participant

Oct.20^{th}-21^{st}, 2022	Conference of European Statistics Stakeholders (CESS2022). Poster presented "Benford's networks"
Jun. 8^{th}, 2018	ESAC workshop "New perspectives and priorities for EU 2030 Indicators", Rome (IT)
Jun. 4^{th} -9^{th}, 2018	12^{th} Edition of the International Summer School on Risk Measurement and Control, Rome (IT)
Sep. 20^{th}-22^{nd}, 2012	Modelli Dinamici in Economia e Finanza (MDEF 2012) , Urbino (IT)
Sep. 25^{th}-27^{th}, 2008	Modelli Dinamici in Economia e Finanza (MDEF 2008), Urbino (IT)
Jun. 7^{th}-11^{th} 1999	Summer school "Fondamenti e sviluppi della matematica per l'economia", Accademia Aeronautica, Pozzuoli (IT) organized by the University Federico II di Napoli
Sep. 28^{th} -30^{th},1998	International workshop on Econophysics and statistical finance, Palermo (IT)
Sep. 9^{th} -12^{th}, 1998	XXII A.M.A.S.E.S. (Associazione per la Matematica Applicata alle Scienze Economiche e Sociali) conference, Rome (IT)
Jun. 22^{nd}-Jul. 10^{th}, 1998	Summer school "Fondamenti e sviluppi della matematica per l'economia", Accademia Aeronautica, Pozzuoli (IT) organized by the University Federico II di Napoli (IT)
Sep. 10^{th}– 13^{th}, 1997	XXI Convegno A.M.A.S.E.S., Rome (IT)

Part VIId – Editorial activity

Guest Editor

"Physics of Competition and Conflicts", DYSES Journal Vols.1, 2 (2010), ISSN 1852.379x. Special issue.

Editorial Board/IAB

- Journal of Applied Quantitative Methods (JAQM) http://www.jaqm.ro/ ; http://www.jaqm.ro/advisoryboard.php ISSN 1842-4562.
- DYSES Journal http://dyses.org.ar/ojs2333/index.php/jdyses/index ISSN 1852.379x.
- Applied Mathematics Journal Website: http://journal.sapub.org/AM p-ISSN 2163-1409, e-ISSN 2136-1425. Editorial Board Website: http://www.sapub.org/journal/editorialboard.aspx?JournalID=1024
- International Journal of Applied Mathematical Research (IJAMR) **ISSN:** 2227-4324 http://www.sciencepubco.com/index.php/ijamr

Part VIIe - Referee activity

Advances and Applications in Statistical Sciences, Advances in Complex Systems, Bentham e-book series, Central European Journal of Physics, Chaos Solitons and Fractals, Communications Nonlinear Science and Numerical Simulations, Discrete and Continuous Dynamical System – B, Entropy, European Journal of Operations Research, EuroPhysics Letters (EPL), IEEE Computational Intelligence in Finance, International Journal of Bifurcation and Chaos (IJBC), International Review of Financial Analysis, Journal of Finance *and Accounting (IJFA), Journal Of Network Theory In Finance, Neurocomputing, Physica A, PLoS ONE, Reliability Engineering & System Safety, Review of Managerial Science, Social Indicators Research, Soft Computing, Sustainability, The European Physical Journal B.*

Part VIIf – Evaluation of research projects

FIRB, IFD (Innovation Funds Denmark), PRIN, FRS-FNRS, FWO, SUPSI (CH), Johannes Kepler University Linz (AT).

Part VIII – Summary of Scientific Achievements

ORCID: https://orcid.org/0000-0001-6951-2707

Product type	Number	Data Base	Start	End
Papers [international]	57	GoogleScholar (42 in Scopus)	1995	2020
Papers [class "A" Area CUN 13/D4]	9	GoogleScholar (9 in Scopus)	2011	2020
Papers [national]	1	GoogleScholar	1995	2020
Books [teaching]	3	Iris (Sapienza University of Rome)	2010	2020
Books [scientific]	0	GoogleScholar	2010	2020

Moreover

Hirsh index H	15	GoogleScholar	1995	2020
Normalized H index	0.55 (=15/(2022-1995))	GoogleScholar		
Total citations	526	GoogleScholar	1995	2020
Average Citations per Product	11.6 (=674/(57+1))	GoogleScholar	1995	2020

Evaluation of the research activity

- Report 2005: the internal valuation committee of the University of Tuscia has selected the following paper for the national report over the research activity of the Athenaeum:
  R. Cerqueti, G. Rotundo, "Microeconomic modeling of financial time series with long term memory".
- Report 2003-2006: the following three papers were selected to contribute to the total amount of 13 papers of the Faculty of Economics, therefore providing the major single-author contribution to the research activity of the Faculty:
  1. G. Rotundo, "Neural networks for large financial crashes forecast";
  2. G. Rotundo, "The Hurst's exponent in technical analysis signals";
  3. G. Rotundo, "Logistic function in large financial crashes".
- Report 2009, 2010, 2011: overall evaluation leading to 'A' class, Ministerial reference.
- Report on the evaluation ANVUR-VQR 2006-2010: score 2.4 on the range [0,3], corresponding to the upper tertile in the distribution of scores of associate professors in Italy belonging to the same scientific sector.
- Report on the evaluation ANVUR-VQR 2011-2014: not available, due to the participation to the national strike against the blockage of the salary. However, 3 papers of class A were published in the time frame.

Part IX– 16 selected publications

1. R. de Kok, G. Rotundo (2022). Benford networks. Stats, online first, accepted
2. R. Cerqueti, G. Rotundo (2022) The weighted cross-shareholding complex network: a copula approach to concentration and control in financial markets, JEIC, online first https://link.springer.com/article/10.1007/s11403-022-00364-7
3. C. Herteliu, S. Levantesi, G. Rotundo (2021) Network analysis of pension funds investments. Physica A (579) 1, 126139 DOI: 10.1016/j.physa.2021.126139
4. A. M. D'Arcangelis, S. Levantesi, G. Rotundo (2021) A complex networks approach to pension funds. Journal of Business Research, (129) 687-702, published online (2019-17pp.). DOI: 10.1016/j.jbusres.2019.10.071, Scopus:2-s2.0-85076590804, IF 4.028. Google Scholar Citations: 0. "Class A" Area CUN 13 S.C. B,C; A(<2017),D(<2017).
5. A. M. D'Arcangelis, G. Rotundo (2021) Herding in mutual funds: A complex network approach. Journal of Business Research, (129) 679-686, published online first (2019-8pp.). DOI: 10.1016/j.jbusres.2019.11.016, Scopus:2-s2.0-85076578135. IF 4.028. Google Scholar Citations: 1. "Class A" Area CUN 13 S.C. B,C; A(<2017),D(<2017).
6. R. Cerqueti, G. Rotundo, M. Ausloos (2020) Tsallis Entropy for Cross-Shareholding Network Configurations. Entropy, 22 (6) 676 (15pp.). DOI: 10.3390/e22060676, IF 2.494. Google Scholar Citations: 0.
7. R. Castellano, R. Cerqueti, G. Rotundo (2020) Exploring the financial risk of a temperature index: a fractional integrated approach. Ann Oper Res 284(1), 225–242. DOI: 10.1007/s10479-018-3063-0, Scopus:2-s2.0-85053938183, IF 1.217. Google Scholar Citations: 3. "Class A" Area CUN 13 S.C. D4.
8. M. Cinelli, G. Ferraro, A. Iovanella, G. Rotundo (2019) Assessing the impact of incomplete information on the resilience of financial networks. Ann Oper Res. (25pp.). DOI: 10.1007/s10479-019-03306-y, Scopus:2-s2.0-85069212440, IF 1.217. Google Scholar Citations: 5. "Class A" Area CUN 13 S.C. D4.
9. R. Cerqueti, V. Fanelli, G. Rotundo (2019) Long run analysis of crude oil portfolios. Energy Economics, 79, 183-205. DOI: 10.1016/j.eneco.2017.12.005, ISI(WOS):000474320800014, Scopus:2-s2.0-85042162827, IF 3.199. Google Scholar Citations: 5. "Class A" Area CUN 13 S.C. D4.
10. R. Cerqueti, G. Rotundo, M. Ausloos (2018) Investigating the Configurations in Cross-Shareholding: A Joint Copula-Entropy Approach. Entropy 20(2) 134 (24pp.). DOI: 10.3390/e20020134, ISI(WOS):000426793900057, Scopus:2-s2.0-85047094963, IF 2.305. Google Scholar Citations: 13.
11. L. Bellenzier, J. Vitting Andersen, G. Rotundo (2016) Contagion in the world's stock exchanges seen as set of coupled oscillators. Economic Modelling, 59, 224-236. DOI: 10.1016/j.econmod.2016.07.002, ISI(WOS):000387191500019, Scopus:2-s2.0-84980378950, IF 1.481. Google Scholar Citations: 16. .
"Class A" Area CUN 13 S.C. A, C,D1-D3.
12. C. Herteliu, B. V. Ileanu, M. Ausloos, G. Rotundo (2015) Effect of religious rules on time of conception in Romania from 1905 to 2001. Human Reproduction, 30 (9), 2202-2214. DOI: 10.1093/humrep/dev129, ISI(WOS):000361217300027, Scopus:2-s2.0-84940749939, IF 4.990. Google Scholar Citations: 26. "Class A" Area CUN 13 S.C. D4.

13. A. M. D'Arcangelis, G. Rotundo (2015) Mutual funds relationships and performance analysis. Quality & Quantity, 49, 1573-1584. DOI: 10.1007/s11135-014-0066-z, ISI(WOS):000355922200016, Scopus:2-s2.0-84930764066, IF 0.728. Google Scholar Citations: 8. "Class A" Area CUN 13 S.C. D4.
14. R. Cerqueti, G. Rotundo (2015) A review of aggregation techniques for agent-based models: understanding the presence of long-term memory. Quality&Quantity, 49, 1693-1717. DOI: 10.1007/s11135-014-9995-9, ISI(WOS):000355922200025, Scopus:2-s2.0-84930766692, IF 0.728. Google Scholar Citations: 5. "Class A" Area CUN 13 S.C. D4.
15. G. Rotundo, A. M. D'Arcangelis (2014) Network of companies: an analysis of market concentration in the Italian stock market. Quality & Quantity, 48 (4), 1893-1910. DOI 10.1007/s11135-013-9858-9, ISI(WOS):000337248200006, Scopus:2-s2.0-84902366386, IF 0.728. Google Scholar Citations: 19. "Class A" Area CUN 13 S. C. D4.
16. G. Rotundo, M. Ausloos (2013) Complex-valued information entropy measure for networks with directed links (digraphs). Application to citations by community agents with opposite opinions. Eur. Phys. J. B 86 (4): 169 (10 pp.). DOI: 10.1140/epjb/e2013-30985-6, ISI(WOS):000318408100054, Scopus:2-s2.0-84876827746, IF 1.282. Google Scholar Citations: 17. "Class A" Area CUN 13 S. C. D4.
17. N. K. Vitanov, M. Ausloos, G. Rotundo (2012) Discrete model of ideological struggle accounting for migration. Advances in Complex Systems, Vol 15, Supplementary Issue 1, 1250049 (20 pp.). DOI: 10.1142/S021952591250049X, ISI(WOS):000305286500005, Scopus:2-s2.0-84862563921, IF 1.213. Google Scholar Citations: 43.
18. J. Vitting Andersen, A. Nowak, G. Rotundo, L. Parrott, S. Martinez (2011) "Price-Quakes" Shaking the World's Stock Exchanges. PLoS ONE, 6(11): e26472 (8pp.). DOI: 10.1371/journal.pone.0026472, ISI(WOS):000297154900021, Scopus:2-s2.0-80355136409, IF 4.411. Google Scholar Citations: 25. "Class A" Area CUN 13 S.C. D4.

Part X– Other recent publications

Papers in international journals

1. A. M. D'Arcangelis, G. Rotundo (2019) Systemic Risk of Non Performing Loans Market. The Italian case. Journal of Applied Quantitative Methods, ISSN 1842-4562, Volume 14, Issue 1 (17pp.). http://jaqm.ro/issues/volume-14,issue-1/0_A_G.PHP
2. C. Herteliu, M. Ausloos, B. V. Ileanu, G. Rotundo, T. Andrei (2017) Quantitative and Qualitative Analysis of Editor Behavior through Potentially Coercive Citations. Publications, 5 (2) (16pp.). DOI:10.3390/publications5020015, ISI(WOS):000404531800010, Scopus:2-s2.0-85033223547, IF 1.8
3. C. Herteliu, B. V. Ileanu, M. Ausloos, G. Rotundo (2015) Pitfalls in Testing with Linear Regression Model by OLS. The Recent Case Study of Ramadan Fasting Effects on Sex-Ratio at Birth, and Birth Weight in German Muslim Babies. Journal of Applied Quantitative Methods, 10 (4): 65 (3pp.).
4. G. Rotundo, M. Ausloos, C. Herteliu, B. Ileanu (2015) Hurst exponent of very long birth time series in XX century Romania. Social and religious aspects. Physica A 429, 109-117. DOI:10.1016/j.physa.2015.02.003, ISI(WOS):000353082200012, Scopus:2-s2.0-84924262991, IF 1.522.

5. G. Rotundo (2014) Black-Scholes-Schrodinger-Zipf-Mandelbrot model framework for improving a study of the coauthor core score. Physica A 404, 296-301. DOI:10.1016/j.physa.2014.02.011, ISI(WOS):000335638300029, Scopus:2-s2.0-84896529512, IF 1.522.
6. R. Cerqueti, G. Rotundo (2012) The Role of Diversity in Persistence Aggregation. International Journal of Intelligent Systems, ISSN: 1098-111X, 27 (2) 176–187, Published online on 28Dic2011. DOI:10.1002/int.21519, ISI(WOS): 000298596400007, Scopus:2-s2.0-84855176831, IF 1.653.
7. G. Rotundo, A. M. D'Arcangelis (2010) Network analysis of ownership and control structure in the Italian Stock market. Advances and Applications in Statistical Sciences, ISSN 0974-68119, Special Issue Vol. 2, Issue 2, 255-273.
8. G. Rotundo, M. Ausloos (2010) Organization of networks with tagged nodes and biased links: A priori distinct communities. The case of intelligent design proponents and Darwinian evolution defenders. Physica A, ISSN: 0378-4371, 389 (23) 5479-5494. DOI:10.1016/j.physa.2010.07.029, ISI(WOS):000283904000015, Scopus:2-s2.0-77957750794, IF 1.522.
9. G. Rotundo, A. M. D'Arcangelis (2010) Ownership and control in shareholding networks. Journal of Economic Interaction and Coordination, ISSN 1860-711X, Volume 5, Issue 2, 191-219. DOI: 10.1007/s11403-010-0068-4, ISI(WOS):000284780700007, Scopus:2-s2.0-78649908874, IF 0.759.
10. R. Cerqueti, G. Rotundo (2010) Options with underlying asset driven by a fractional brownian motion: crossing barriers estimates. New Mathematics and Natural Computation, ISSN: 1793-0057, Vol. 6, No. 1, 109-118. DOI: 10.1142/S1793005710001633, ISI(WOS): 000233670801125.
11. R. Cerqueti, G. Rotundo (2009) Companies' Decisions for Profit Maximization: A Structural Model". Applied Mathematical Sciences, ISSN 1312-885X, Vol. 3, 27, 1327 – 1340. Scopus:2-s2.0-77950948575, IF 0.275.

Books

1. G. Rotundo (2010) Dall'integrale di Riemann all'integrale di Itô, Aracne ed, ISBN 978-88-548-3751-5.
2. C. Pocci, G. Rotundo, R. de Kok (2016) MATLAB per le applicazioni economiche e finanziarie, Apogeo, 176pp., EAN: 9788891619921. The version in English has been published in 2017 with the same Editor.
3. C. Pocci, G. Rotundo, R. de Kok (2017) Matlab for applications in Economics and Finance, Apogeo, 176pp., EAN: 9788891623027, ISBN: 8891623024

Chapters in books

1. G. Rotundo, A. M. D'Arcangelis (2016) Complex networks in finance. In: Complex Networks and Non linear Dynamics, Springer. Eds. P. Commendatore, M. Matilla-García, L. M. Varela, J. S. Cánovas. Vol. 683 of the series Lecture Notes in Economics and Mathematical Systems pp 209-235. DOI: 10.1007/978-3-319-40803-3_9, ISI(WOS):000392194600010, Scopus:2-s2.0-84988316955
2. L.M. Varela (Cabo), G. Rotundo (2016) Complex Network Analysis and Nonlinear Dynamics. In: Complex Networks and Non linear Dynamics, Springer. Eds. P. Commendatore, M. Matilla-García, L. M. Varela, J. S. Cánovas. Volume 683 of the series Lecture Notes in Economics and Mathematical Systems pp 3-25. DOI: 10.1007/978-3-319-40803-3_1, ISI(WOS):000392194600002, Scopus:2-s2.0-84988381240

3. G. Rotundo, B. Tirozzi (2016) Portfolio optimization: a mean field theory approach. In: Theory and applications in Mathematical Physics: In Honor of 70th B. Tirozzi's Birthday, World Scientific Publishing, 119-130. ISBN-13: 978-9814713276, ISBN-10: 9814713279
4. L. M. Varela Cabo, G. Rotundo, M. Ausloos, J. Carrete (2015) Complex networks analysis in socioeconomic models. In: Complexity and Geographical Economics - Topics and Tools. Springer series Dynamic Modeling and Econometrics in Economics and Finance, Vol. 19. Editors: Pasquale Commendatore, Saime S. Kayam and Ingrid Kubin, ISBN 978-3-319-12805-4, pp 209- 245 (review paper). ISSN number: 2409-7497. DOI: 10.1007/978-3-319-40803-3
5. G. Rotundo (2013) An investigation of computational complexity of the method of symbolic images. In: Araceli N. Proto, Massimo Squillante, Janusz Kacpryzk eds, "Advanced Dynamic Modeling of Economic and Social Systems", "Studies in Computational Intelligence" series, Springer, ISBN 978-3-642-32902-9, pp. 109-126. DOI: 10.1007/978-3-642-32903-6_9, ISI(WOS):000312510100009, Scopus:2-s2.0-84870402291
6. G. Rotundo (2011) Centrality Measures in Shareholding Networks. In: "Use of Risk Analysis in Computer-Aided Persuasion", Edited by Ekrem Duman, Amir Atiya, NATO Science for Peace and Security Series - E: Human and Societal Dynamics, Volume 88, pp. 12 - 28. ISBN 978-1-60750-827-4 (print) ISBN 978-1-60750-828-1 (online), ISSN 1874-6276.
7. G. Rotundo (2010) Neural Networks for Non-independent Lotteries. In: Springer series "Studies in Fuzziness and Soft Computing" (R.R. Kacprzyk, J. Ed.), "Preferences and Decisions" Greco, S., Marques Pereira, R.A., Squillante, M., Yager, R.R., Kacprzyk, J. (Eds.), Vol. 257, pp. 369-375, ISBN 978-3-642-15975-6, e-ISBN 978-3-642-15976-3, ISSN 1434-9922. ISI(WOS):000292630700022, Scopus:2-s2.0-77956386967.
8. R. Cerqueti, G. Rotundo (2010) Memory Property in Heterogeneously Populated Markets. In: Springer series "Studies in Fuzziness and Soft Computing" (R.R. Kacprzyk, J. Ed.), "Preferences and Decisions" Greco, S., Marques Pereira, R.A., Squillante, M., Yager, R.R., Kacprzyk, J. (Eds.), Vol. 257, Preferences and Decisions, pp. 53-67. ISBN/ISSN: 978-3-642-15975-6. DOI:10.1007/978-3-642-15976-3_4. ISI(WOS):000292630700004, Scopus:2-s2.0-77956363813.
9. R. Cerqueti, G. Rotundo (2010) Firms clustering in presence of technological renewal processes. In: T. Puu, A. Panchuk, "Nonlinear Economic Dynamics", Nova Science Publishers, pp. 135-145. ISBN 978-1-61668-788-5. Scopus:2-s2.0-84896439911.

Conference proceedings

1. G. Rotundo, A. M. D'Arcangelis, Network of firms: an analysis of the relevance of integrated ownership in market concentration. In: Science and Technology for Humanity (TIC-STH), 2009 IEEE Toronto International Conference, Toronto, Canada (26-27 Sept. 2009) pp. 685 – 690. ISBN: 978-1-4244-3877-8, INSPEC Accession Number: 11229830. DOI: 10.1109/TIC-STH.2009.5444411, ISI(WOS):000278343700121, Scopus:2-s2.0-77952683095.
2. F. Pozzi, T. Aste, G. Rotundo, T. Di Matteo, Dynamical correlations in financial systems. In: Complex Systems II, Edited by Derek Abbott, Tomaso Aste, Murray Bachelor, Robert Dewar, Tiziana Di Matteo, Tony Guttmann, Proc. SPIE Vol. 6802,

68021E (Jan. 5, 2008). ISBN: 978-0819469731. DOI: 10.1117/12.758822, ISI(WOS):000253877000033, Scopus:2-s2.0-41149116093.

Previous selected papers

(*) chapters in books

1. F. Petroni, G. Rotundo, “Effectiveness of measures of performance during speculative bubbles”. Physica A, ISSN: 0378-4371, (2008) 387 (15) 3942-3948. DOI:10.1016/j.physa.2008.02.070, ISI(WOS):000256408100020, Scopus:2-s2.0-43049087710, IF 1.522
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