

Massimiliano Giuli

Curriculum

Personal data

Nationality: Italian

Date of birth: December 12th, 1973

Place of birth: L'Aquila, Italy

massimiliano.giuli@univaq.it

Education

Degree in Matematica: *Equazioni di evoluzione per la finanza*, University of L'Aquila, July 1997, cum laude

Ph.D. in Matematica per le decisioni economiche: *Diffusion models for stock prices in a financial market under heterogeneous trading and learning*, University of Pisa, 2002

Master in *Foundations and developments of mathematical economics*, Dipartimento di Matematica e statistica, Università di Napoli Federico II, Accademia aeronautica di Pozzuoli, 1998

Scuola Matematica Interuniversitaria (*Functional Analysis* - C. Citrini, *Probability* - P. Protter), Perugia, 1997

Positions held

Professore associato of Metodi matematici dell'economia e delle scienze attuariali e finanziarie (SECS-S/06), from 2018

Ricercatore of Metodi matematici dell'economia e delle scienze attuariali e finanziarie (SECS-S/06) (2002-2017)

Department of Sistemi ed Istituzioni per l'Economia (2002-2011)

Department of Information Engineering, Computer Science and Mathematics (from 2012)

University of L'Aquila

National Scientific Qualification

Seconda Fascia - Settore concorsuale 13/D4

Year 2017

Teaching experience

University of L'Aquila

Undergraduate courses:

Matematica finanziaria I

Matematica generale esercitazioni

Modelli di simulazione

Idoneità informatica

Precorso di matematica

Facoltà di Economia

Facoltà di Economia

Facoltà di Economia

Facoltà di Economia

Department of Information Engineering, Computer Science and Mathematics

MSc courses:

Matematica per le applicazioni economiche e finanziarie

Department of Industrial and Information Engineering and Economics

Teoria del rischio

Department of Industrial and Information Engineering and Economics

Metodi matematici per la finanza e le assicurazioni

Department of Industrial and Information Engineering and Economics

Finanza matematica

Facoltà di Economia

Matematica finanziaria II
MSc courses in English Language:
Mathematical economics and finance

Facoltà di Economia

Department of Information Engineering, Computer Science and Mathematics, InterMaths programme, partners: Brno University of Technology (BUT), University of Silesia in Katowice (US), Ivan Franko National University of Lviv (LNU)

Mathematical methods for risk analysis

Department of Civil, Construction-Architectural and Environmental Engineering

Ph.D. courses:

Mathematical models for economic equilibria

Mathematics and Modeling

Other courses:

Didattica e fondamenti di matematica finanziaria

TFA II ciclo, Classe A048

Didattica e fondamenti di matematica finanziaria

PAS, Classe A048

University of Teramo

MSc courses:

Analisi finanziaria

Facoltà di Scienze politiche

Ph.D. Board

Metodi matematici per l'economia, l'azienda, la finanza e le assicurazioni

Libera Univ. Inter.le Studi Sociali "Guido Carli" LUISS Roma

Year 2006

Ciclo: XXII

Participation in the PRIN project

Il problema della gestione del debito pubblico: modelli di controllo stocastico

Libera Univ. Inter.le Studi Sociali "Guido Carli" LUISS Roma

Year 2006

Modelli di mercato e di corporate finance per la realtà italiana

Università di Pisa

Year 2003

Member of REPRISE (Register of Expert Peer Reviewers for Italian Scientific Evaluation)

MIUR

From 2013

Committees

University of L'Aquila:

Diritto allo studio, from 2011

Tasse, from 2014

Disciplina sezione ricercatori, 2017

Department of Information engineering, computer science and mathematics:

Giunta

Ricerca e regolamenti

Commissione Orientamento (CAD Matematica)

Comunicazione e Sito Web

Facoltà di Economia (up to 2011):

Orientamento e tutorato

Piani di studio

Research interests

Set-valued analysis, fixed points, optimization, variational inequalities, equilibrium problems, Nash games, abstract economies, generalized monotonicity, generalized convexity, nonsmooth analysis

Conferences

Organizer:

Workshop on Optimization and variational analysis (L'Aquila, 2013)

Speaker:

Optimization and Related Topics (Milano, 2019)

I Conference on Minimax Inequalities and Equilibrium Problems (Granada, 2019)

Afternoon Workshop in Optimization (Milano, 2019)

29th European Conference on Operational Research, EURO2018 (Valencia, 2018)

Variational analysis, equilibria and optimization (Pisa, 2017)

11th EUROPT Workshop on Advances in Continuous Optimization (Firenze, 2013)

Recent developments on mathematical programming and applications (Pisa, 2009)

XXX Convegno Amases (Trieste, 2006)

XXV Convegno Amases (Firenze, 2001)

Evolution equations: applications to physics, industry, life sciences and economics (Levico Terme, 2000)

XXII Convegno Amases (Genova, 1998)

Refereeing and reviewing

Referee: Journal of optimization theory and applications, Journal of global optimization, Operations research letters, Journal of convex analysis, optimization, Decisions in economics and finance

Reviewer: Mathematical reviews

Publications

Papers in refereed journals:

1. Castellani, M.; Giuli, M.: Mathematical justification of a generalized equilibrium problem. *J. Nonlinear Var. Anal.* 5 (2021) 421--427
2. Castellani, M.; Giuli, M.; Pappalardo, M.: Existence results for a wide class of equilibrium problems: a general scheme. *J. Nonlinear Convex Anal.* 21 (2020) 1219--1224
3. Castellani, M.; Giuli, M.: Existence of quasiequilibria in metric vector spaces. *J. Math. Anal. Appl.* 484 (2020) 123751
4. Castellani, M.; Giuli, M.: A coercivity condition for nonmonotone quasiequilibria on finite-dimensional spaces. *J. Global Optim.* 75 (2019) 163--176
5. Castellani, M., Giuli, M., Pappalardo, M.: A Ky Fan minimax inequality for quasiequilibria on finite dimensional spaces, *J. Optim. Theory Appl.* 179 (2018) 53--64
6. Giuli, M.: Cyclically monotone equilibrium problems and Ekeland's principle, *Decis. Econ. Finance* 40 (2017) 231--242
7. Castellani, M., Giuli, M.: Ekeland's principle for cyclically antimonotone equilibrium problems, *Nonlinear Anal. Real World Appl.* 32 (2016) 213--228
8. Castellani, M., Giuli, M.: Approximate solutions of quasiequilibrium problems in Banach spaces, *J. Global Optim.* 64 (2016) 615--620
9. Castellani, M., Giuli, M.: Stability and existence results for quasimonotone quasivariational inequalities in finite dimensional spaces, *Appl. Math. Optim.* 73 (2016) 137--152
10. Castellani, M., Giuli, M.: An existence result for quasiequilibrium problems in separable Banach spaces, *J. Math. Anal. Appl.* 425 (2015) 85--95
11. Castellani, M., Giuli, M., Nobakhtian, S., Pappalardo M.: Local cone approximations in mathematical programming, *Optimization* 64 (2015) 1669--1681
12. Giuli, M.: Closedness of the solution map in quasivariational inequalities of Ky Fan type, *J. Optim. Theory Appl.* 158 (2013) 130--144
13. Castellani, M., Giuli, M.: Refinements of existence results for relaxed quasimonotone equilibrium problems, *J. Global Optim.* 57 (2013) 1213--1227

14. Castellani, M., Giuli, M.: Pseudomonotone diagonal subdifferential operators, *J. Convex Anal.* 20 (2013), 1--12
15. Castellani, M., Giuli, M.: A characterization of the solution set of pseudoconvex extremum problems, *J. Convex Anal.* 19 (2012) 113--123
16. Bigi, G., Castellani, M., Giuli, M., Panicucci, B., Pappalardo, M., Passacantando, M.: Recent advances in equilibrium problems, *Quaderni di Matematica* 27 (2012), 41--66
17. Castellani, M., Giuli, M.: On equivalent equilibrium problems. *J. Optim. Theory Appl.* 147 (2010) 157--168
18. Castellani, M., Giuli, M.: Predicting excess returns under heterogeneous trading and learning: A diffusive approach, *Finance Letters* 3 (2005) 12--16
19. Giuli, M., Monte, R.: Diffusion processes in a financial market under heterogeneous trading and learning, *Rend. Sem. Mat. Messina Ser. II* 8(23) (2001/02), 233--247 (2004)
20. Colombo, F., Giuli, M., Vespri, V.: Generation of smoothing semigroups by degenerate elliptic operators arising in financial mathematics, *Commun. Appl. Anal.* 3 (1999) 283--302

Papers in refereed books:

1. Castellani, M., Giuli, M.: On paramonotone and pseudomonotone* maps, *Recent developments on mathematical programming and applications* 144, 41--55, Aracne Editrice, 2009
2. Giuli, M., Gozzi, F., Monte, R., Vespri, V.: Generation of analytic semigroups and domain characterization for degenerate elliptic operators with unbounded coefficients arising in financial mathematics. II, *Functional analysis and evolution equations*, 315--330, Birkhäuser, Basel, 2008
3. Giuli, M., Vespri, V.: Speculative dynamics and feedback trading. A nonlinear model, In: *Proceedings of the 4th JSAM-SIMAI Seminar on Industrial and Applied Mathematics, Gakuto international series, Mathematical sciences and applications* 28, 43--51, Gakkotosho, Tokyo, 2008
4. Castellani, M., Giuli, M.: The axiomatic bargaining problem: a brief survey, In: *Recent developments on applied mathematics* 219, 25--44, Aracne Editrice, 2007
5. Castellani, M., D'Ottavio, A., Giuli, M.: A mean value theorem for K-directional epiderivatives, *Recent advances in optimization (Varese, 2002)*, 21--34, Datanova, Milan, 2003
6. Colombo, F., Giuli, M., Vespri, V.: A semigroup approach to no-arbitrage pricing theory: constant elasticity variance model and term structure models, *Evolution equations: applications to physics, industry, life sciences and economics (Levico Terme, 2000)*, 113--126, *Progr. Nonlinear Differential Equations Appl.*, 55, Birkhäuser, Basel, 2003

Conference proceedings:

1. Giuli, M., Vespri, V.: Speculative dynamics and feedback trading. A nonlinear model, *Atti del XXX Convegno AMASES (Trieste, 2006)*
2. Giuli, M., Monte, R.: Diffusion processes in financial a market under heterogeneous trading and learning, *Extended abstract su Atti del XXV Convegno AMASES (Firenze, 2001)*
3. Colombo, F., Giuli, M., Vespri, V.: Generation of smoothing semigroups by degenerate elliptic operators arising in financial mathematics, *Atti del XXII Convegno AMASES (Genova, 1998)*, 137--152

Reports:

1. Barucci, E., Giuli, M., Monte, R.: *Asset Prices under Bounded Rationality and Noise Trading*, Dipartimento di Statistica e matematica applicata all'economia, Università di Pisa, Report n. 181, June 2000