AMASES XLIII

Perugia, September 9-11, 2019

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
DEPARTMENT OF ECONOMICS

UNIVERSITY OF PERUGIA

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AMASES Award

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A stochastic model to quantify demographic profit and loss coherent with the market consistent valuation
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Portfolio optimization with self-exciting Lévy process
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Market nanostructure: how traders shape the dynamics of limit order books
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A social network system for the car insurance fraud detection
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Rosella Giacometti, Gabriele Torri and Sandra Paterlini

Cryptoassets and Blockchain: Economic and Computational aspects [CBEC]

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Marco Patacca, Gianna Figà-Talamanca and Sergio Focardi

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Marta Biancardi, Lucia Maddalena and Giovanni Villani

Persuasive Stackelberg strategies and Application in Common Pool Resources
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Non-transferable utility Games in Partition Function Form
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Distributionally robust liability-driven pension fund management
Giorgio Consigli, Rui Gao, Anton Kleywegt and Asmerilda Hitaj

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Medium-term assessment of Premium Risk in Non-Life insurance based on Solvency II framework
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Time Consistent Optimal Asset Allocation for Life Insurance Funds
Anna Maria Gambaro

Improving the assessment of longevity risk using survey data on subjective beliefs
Giovanna Apicella and Enrico De Giorgi

The Calculation of Pure Premium for Non-Life Insurance by Generalized Non-Homogeneous Markov Reward Processes
Guglielmo D'Amico, Guillen Montserrat, Jacques Janssen, Raimondo Manca, Filippo Petroni and Ernesto Volpe di Prignano

Individual claim reserving in credit insurance using Machine Learning techniques
Damiano Ticconi

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A Beta regression two-part model for partial and total surrender cash flows
Paolo de Angelis, Fabio Baione and Davide Biancalana

Analitycal valuation of surrender options in participating policies with minimum guaranteed
Maria Chiarolla, Tiziano De Angelis and Gabriele Stabile

On the optimal design of participating life insurance contracts
Anna Rita Bacinello, Chiara Corsato and Pietro Millossovich

Testing the least squares Monte Carlo method for the evaluation of capital requirements in life insurance
Massimo Costabile

Pension annuities and real estate: a contractual solution
Marilena Sibillo, Valeria D'Amato, Emilia Di Lorenzo, Steven Haberman and Roberto Tizzano

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Xue-Zhong He, Lei Shi and Marco Tolotti

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Maria Gabriella Graziano, Marialaura Pesce and Niccolò Urbinati

The Bankruptcy Problem: different approaches
Chiara Donnini

Cooperation of groups - an optimal transport approach
Xinyang Wang

Housing markets with limited externalities
Claudia Meo and Bettina Klaus

Multiple Criteria Decision Making [MCDM]

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Hierarchy Stochastic Multi-Attribute Acceptability Analysis: Performance evaluations of energy companies
Maria Rosaria Pappalardo and Silvia Angilella

Optimal selection and environmental sustainability of innovative storage conditions and packaging technologies in cheesecake production
Luca Grilli, Michele Gutierrez, Lucia Maddalena and Antonio Piga

An improved version of the deck of cards method to build evaluation scales
Salvatore Corrente, Josè Figueira and Salvatore Greco

ELECTRE Score: a first Outranking Based Scoring Method
Salvatore Greco, José Rui Figueira and Bernard Roy

Electre Methods for analyzing the behaviour of economic agents
Gerarda Fattoruso, Gabriella Marcarelli, Massimo Squillante and Maria Grazia Olivieri

Necessary and sufficient conditions for the consistency in pairwise comparisons
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Coherent weights for pairwise comparison matrices and a mixed-integer linear programming problem
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Rosario Maggistro and Giacomo Como

A percolation approach for the detection of bottlenecks in air traffic networks
Salvatore Micciche', Giuseppe Pappalardo and Rosario Nunzio Mantegna

Community structures based on multi-attributes in International Trade Network
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Comparing Operational Terrorist Networks
Matteo Gregori and Ugo Merlone

Economic shocks, financial contagion and systemic risk in the euro area
Mattia Montagna, Gabriele Torri and Giovanni Covi

The network of the economic content in the US Presidents' speeches: a study of the interconnectedness
Jessica Riccioni, Matteo Cinelli and Valerio Ficcadenti

Regularized Networks and Doom-Loop Effects: Evidence from the CDS Market
Giovanni Bonaccolto, Andrea Consiglio, Michele Tumminello and Pietro Vassallo

Similarity and systemic risk in the network of mutual fund holdings
Danilo Delpini, Stefano Battiston, Guido Caldarelli and Massimo Riccaboni

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Learning-by-doing and knowledge spillover networks in an industrial district with heterogeneous firms
Fausto Cavalli, Ahmad Naimzada and Nicolò Pecora

Envy effects on conflict dynamics in supervised work groups
Arianna Dal Forno and Ugo Merlone

Global Indeterminacy of the Equilibrium in a Endogenous Growth Disposal Resource Model
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A contribution to the theory of fertility and economic development
Mauro Sodini and Luca Gori

Monopoly with differentiated final goods and heterogeneous markets
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Nonlinear Dynamics in Finance [NED-FN]

Investor sentiment and trading behavior
Giovanni Campisi and Silvia Muzzioli

Disposition effect in a financial market model with heterogeneous agents
Fabio Tramontana and Alessia Cafferata

Do financial markets affect real economy? Influences of professional and non-professional beliefs
Francesca Grassetti, Cristiana Mammana and Elisabetta Michetti

Credit Risk Modelling: Migration Rates Systems with Renewal and an IFRS9-baseline
Simone Landini, Mariacirstina Uberti and Simone Casellina

Nonlinear Dynamics in Macroeconomics [NED-ME]

The Pasinetti-Solow Growth Model with Optimal Saving Behaviour: A Global Bifurcation Analysis
Pasquale Commendatore and Iryna Sushko

A macroeconomic model with R&D and forward looking firms
Lorenzo Cerboni Baiardi, Luca Gori and Mauro Sodini

Nonlinear Evolutionary Models [NED-EM]

Offshoring, reshoring, unemployment and wage dynamics in a two-country evolutionary model
Davide Radi, Fabio Lamantia and Gian Italo Bischi

Evolutionary dynamics in club goods binary games
Gian Italo Bischi, Ugo Merlone and Eros Pruscini

Evolutionary dynamics of compliance in a two-population game of auditors and auditees
Domenico De Giovanni, Fabio Lamantia and Mario Pezzino

Evolutionary selection of heterogeneous expectations with information costs in a Muthian cobweb model
Ahmad Naimzada and Marina Pireddu

An evolutionary approach to the dynamics of compliant firms in groundwater pumping
Marta Biancardi, Gianluca Iannucci and Giovanni Villani

An evolutionary dynamical model for corruption cycles in democratic states
Elvio Accinelli, Filipe Martins, Bruno Oliveira, Alberto Pinto and Atefeh Afsar

Optimal Control Problems and Related Issues [DECVA-OC]

Optimal control problems and Sub-Riemannian geometry: controllability of a macroeconomic system
Massimiliano Ferrara

An evasion problem for differential game with simple motion
Massimiliano Ferrara, Gafurjan Ibragimov, Marks Ruziboev and Bruno Antonio Pansera

Analysis of incentive strategy in a supply chain with a strategic customer
Massimiliano Ferrara, Mehrnoosh Khademi and Somayeh Sharifi

Analysis of some incentives in green supply chain
Massimiliano Ferrara, Mehrnoosh Khademi and Somayeh Sharifi

Existence results of homoclinic solution for nonlinear second-order difference equations
Giuseppe Caristi, Shapour Heidarkhani and David Barilla

Optimal Management Strategy to Control the Removal of an Invasive Species
Stefania Ragni

Optimal management of pumped hydroelectric production with state constrained optimal control
Athena Picarelli and Tiziano Vargiolu

A Stochastic Programming approach for the home energy management
Antonio Violi, Patrizia Beraldi, Maria Elena Bruni and Gianluca Carrozzino

Performance measurement and efficiency analysis [PMEA]

Underestimation functions for a rank-2 partitioning method
Riccardo Cambini

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Giovanna D'Inverno, Mike Smet and Kristof De Witte

Performance evaluation under "Zero-Waste" strategy: Evidence on waste management in Tuscan municipalities
Laura Carosi, Giovanna D'Inverno and Giulia Romano

How does corporate social responsibility impact corporate bond pricing: a worldwide conditional efficiency analysis
Pierluigi Toma, Antonio Salvi, Anastasia Giakoumelou and Massimo Frittelli

Analyzing space-time patterns of technical efficiency in the Italian wine industry: a geographically weighted panel stochastic frontier approach
Francesco Vidoli and Jacopo Canello

Dealing with imperfect compliance in frontier evaluation: a Probabilistic Efficiency Model approach
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Preferences, Choices and Utility Representations [PCU]

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Alfio Giarlotta and Stephen Watson

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Nando Prati

Continuous multi-utility representations of non-total preorders
Alessandro Caterino, Rita Ceppitelli and Lubica Holà

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Rachele Foschi and Fabio L. Spizzichino

Rankability as a strong form of coherence
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Carlo Alberto De Bernardi and Enrico Miglierina

Dealing with concave costs and differentiation in oligopolistic markets via Ky Fan inequalities
Giancarlo Bigi

A sequential optimization model for municipal solid waste management
Elisabetta Allevi, Adriana Gnudi, Igor V. Konnov and Giorgia Oggioni

A sequential optimization approach for multi follower games
Lorenzo Lampariello, Christoph Neumann, Jacopo Maria Ricci, Simone Sagratella and Oliver Stein

A Tikhonov regularization method for equilibrium selection
Lorenzo Lampariello, Christoph Neumann, Jacopo Maria Ricci, Simone Sagratella and Oliver Stein

Existence and regularity results for a general oligopolistic market equilibrium problem
Annamaria Barbagallo and Serena Guarino Lo Bianco

Regular Session Economics [RS-EC]

Manipulation of social choice functions under incomplete information
Michele Gori

Options trading strategies and framing: a cumulative prospect theory approach
Martina Nardon and Paolo Pianca

A Contribution to the NPV vs. IRR Debate
Erio Castagnoli and Gino Favero

On the properties of Λ-quantiles
Fabio Bellini and Ilaria Peri

Regular Session Finance 1 [RS-FIN1]

Measuring risk with COGARCH(p,q) models
Francesco Bianchi, Lorenzo Mercuri and Edit Rroji

Optimal Installation of Solar Panels with Price Impact
Torben Koch and Tiziano Vargiolu

Representation of supply and demand curves on day-ahead electricity markets using mesh-free interpolation techniques
Mariia Soloviova and Tiziano Vargiolu

Pricing financial derivatives with and without barriers: an extremely efficient computational method
Luca Vincenzo Ballestra

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The resilience of ethical financial networks
Roy Cerqueti, Rocco Ciciretti and Marco Nicolosi

Contract Design in Electricity Markets with High Penetration of Renewables: A Two-Stage Approach
Rossana Riccardi, Arega Getaneh Abate and Carlos Ruiz Mora

The migration-tourism nexus in the EU28
Davide Provenzano

Regular Session Finance 3 [RS-FIN3]

Optimal execution with risk-adjusted profit and loss
Xue Cheng, Marina Di Giacinto and Tai-Ho Wang

Measures of Connectedness and Systemic Risk
Marialaura Torrente, Mario Maggi and Pierpaolo Uberti

White Noise Theory: Modelling and Simulation in Finance
Marco Papi, Giovanni Palombo and Alfredo Germani

Equal Risk Contribution portfolios using MAD
Jacopo Maria Ricci, Francesco Cesarone and Mustafa Çelebi Pinar

Regular Session Mathematics for Economics [RS-ME]

ROCOF of higher order for continuous time semi-Markov systems with application in volatility measurement
Guglielmo D'Amico and Filippo Petroni

WISMC, Drawdowns and Speed of Market Crash
Guglielmo D'Amico, Bice Di Basilio and Filippo Petroni

The role of CBOE SKEW index and its relation with volatility and returns
Luca Gambarelli and Silvia Muzzioli

Regular Session Optimization [RS-OPT]

Downside Risk Optimization versus Mean-Variance Optimization
Andrea Rigamonti

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Stefania Corsaro, Valentina De Simone, Zelda Marino and Francesca Perla

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CVA and vulnerable options in stochastic volatility models
Elisa Alos, Fabio Antonelli, Alessandro Ramponi and Sergio Scarlatti

Systemic Optimal Risk Transfer Equilibrium
Francesca Biagini, Alessandro Doldi, Jean-Pierre Fouque and Marco Frittelli

Portfolio choice of large investors who interact strategically
Giuliano Curatola