

# Convegno AMASES 2009

## Programma dei lavori

### Martedì 1° settembre

13.00-14.30 *Registrazione*

14.30-15.00 **Apertura dei lavori**

Aula Co (coordina: A. Olivieri)

A. Olivieri, *Presidente Comitato Organizzatore AMASES 2009*

G. Ferretti, *Rettore Università di Parma*

G. Lugli, *Preside Facoltà di Economia, Università di Parma*

F. Pressacco, *Presidente AMASES*

15.00-16.00 **H.W. Kuhn, *A Life in Optimization: Tales of Eponymy***

Aula Co (coordina: G. Gambarelli)

16.00-17.00 **Finanza matematica**

Aula Co (coordina: G. Favero)

16.00-16.20 R. De Lisa, **S. Zedda**, F. Vallascas, F. Campolongo, M. Marchesi  
*Modelling Deposit Insurance Schemes' Losses in a Basel 2 Framework*

16.20-16.40 **C. Pederzoli**, C. Torricelli  
*The Informative Content of Balance-Sheet Ratios in Assessing Firm Defaults: An Empirical Investigation of Italian SMEs*

16.40-17.00 **A. Mantovi**  
*Long Run Value Stabilization in a Real Options Perspective*

16.00-17.00 **Metodi matematici dell'Economia**

Aula I (coordina: A. Agliari)

16.00-16.20 **F. Mariani**, M.C. Recchioni, F. Zirilli  
*The Congestion Phenomenon for the Traffic of Data Packets on Complex Networks*

16.20-16.40 M. Cardin, **M. Manzi**  
*Aggregation Evaluators on Lattices*

16.40-17.00 **A. Agliari**, F. Tramontana  
*Border-Collision Bifurcations in a Growth Model with Differential Savings*

16.00-17.00 **Teoria dei giochi**

Aula M (coordina: M. LiCalzi)

16.00-16.20 **D. Carfi**  
*Non-Reactive Strategies in Decision-Form Games*

16.20-16.40 G.I. Bischi, **F. Lamantia**  
*Dynamic Oligopoly with Intertemporal Demand Overloads and Capacity Constraints*

16.40-17.00 L. Mallozzi, **V. Scalzo**, S. Tijs  
*Game Models with Fuzzy Outcome*

17.00-17.30 *Pausa caffè*

17.30-18.50 **Finanza matematica**

Aula Co (coordina: M.C. Recchioni)

17.30-17.50 F.E. Benth, **C. Sgarra**

*Risk Premium Sign and Risk-Neutral Pricing in Electricity Market Models*

17.50-18.10 **P. Stucchi**

*Modelling the Energy Price Process on the Italian Market: a Comparison between Mixed-Jump Diffusion Processes and NIG distributions*

18.10-18.30 **L. Fatone**, F. Mariani, M.C. Recchioni, F. Zirilli

*Calibration of a Stochastic Model for Spiky Prices: An Application to Electric Power Prices*

18.30-18.50 L. Fatone, F. Mariani, **M.C. Recchioni**, F. Zirilli

*The Analysis of Electric Power Price Data and of the S&P 500 Index Using a Multiscale Stochastic Volatility Model*

17.30-18.50 **Metodi matematici dell'Economia**

Aula I (coordina: R. Dieci)

17.30-17.50 **C. Donnini**, M.G. Graziano, M. Pesce

*Moving On to the Concept of Fairness under Asymmetric Information*

17.50-18.10 B. Giacomello, **D. Girardi**, **L. Gentili**

*Un sistema di equazioni alle differenze per rappresentare il bilancio contabile*

18.10-18.30 M. Longo, **A. Mainini**

*Stock Compensation and Career Concerns in a Managerial Incentive Problem*

18.30-18.50 **R. Dieci**, F. Westerhoff

*A Simple Model of a Speculative Housing Market*

17.30-18.50 **Ottimizzazione**

Aula M (coordina: L. Martein)

17.30-17.50 **G.P. Crespi**, I. Ginchev, M. Rocca

*Vector Optimization and Vector Minty Variational Inequalities*

17.50-18.10 **E. Pagani**, L. Pellegrini

*On Dual Variables in Linear Vector Optimization*

18.10-18.30 A. Cambini, **L. Carosi**, L. Martein

*The Sum of a Linear and a Linear Fractional Function: Pseudoconvexity on the Nonnegative Orthant and Solution Methods*

18.30-18.50 J.E. Martínez Legaz, **M. Rocco**

*Convex Representations of Maximal Monotone Operators: Fenchel Duality and Surjectivity*

## Mercoledì 2 settembre

9.00-10.45 **Eugenio Levi quarant'anni dopo** (prima parte)

Aula Co (coordina: P. Modesti)

9.00-9.20 *La vita* (L. Levi)

9.20-9.40 *L'attività didattica* (L. Peccati)

9.40-10.00 *L'opera scientifica* (E. Castagnoli)

10.00-10.45 *Ritratti* (G. Urgeletti Tinarelli, A. Alessandrini, L. Tava)

10.45-11.15 *Pausa caffè*

11.15-13.00 **Eugenio Levi quarant'anni dopo** (seconda parte)

Aula Co (coordina: P. Modesti)

11.15-12.15 *Ritratti* (T. Pirondini, G. Galassi, B. Tabacci, M. Trovato)

12.15-12.30 **Premio di laurea "Eugenio Levi"**

*Il Premio di laurea "Eugenio Levi"* (S. Zani)

*Assegnazione del Premio Levi 2009*

12.30-13.00 *Chiusura dei lavori* (A. Guenzi, G. Lugli; *conclusioni*: F. Pressacco)

13.00-14.30 *Colazione di lavoro*

14.30-15.30 **P. Embrechts, *Did a Mathematical Formula Really Blow Up Wall Street?***

Aula Co (coordina: A. Olivieri)

15.30-16.30 **Finanza matematica**

Aula Co (coordina: E. Barucci)

15.30-15.50 **S. Baccarin**

*Optimal Lifetime Consumption of a Generalized Geometric Brownian Motion with Strictly Positive Intervention Costs*

15.50-16.10 E. Barucci, **D. Marazzina**

*Optimal Investment, Labor Income and Retirement*

16.10-16.30 E. Castagnoli, **G. Favero**

*Effectiveness under Frictions. The Fundamental Theorem of Asset Pricing in the State Preference Model with Proportional Frictions*

15.30-16.30 **Matematica attuariale**

Aula M (coordina: F. Pressacco)

15.30-15.50 F. Pressacco, **L. Ziani**

*Heuristic Decisions and Mean-Variance Efficiency in Proportional Reinsurance: the Case of Group Correlation*

15.50-16.10 **G. Piscopo**

*Financial Valuation of Guaranteed Lifelong Withdrawal Benefit Option*

16.10-16.30 **E. Vannucci**

*Optimal Dynamic Surrender Strategies in Life Insurance Policies*

15.30-16.30 **Metodi matematici dell'Economia**

Aula I (coordina: P. Falbo)

15.30-15.50 N. Angelini, R. Dieci, **F. Nardini**

*Heterogeneity, Profitability, and Market Clearing Mechanisms in a Simple Asset Pricing Model*

15.50-16.10 **V. Tulli**, G. Weinrich

*Value-at-Risk, Limited Liability and the Moral-Hazard Problem*

16.10-16.30 **P. Falbo** R. Grassi

*Correlation Breakdown and Rational Financial Crisis*

16.30-17.00 *Pausa caffè*

17.00-19.00 **Finanza matematica**

Aula Co (coordina: L. Peccati)

17.00-17.20 **G. Di Biase**

*Credit Risk Rating Migration Models: Markov versus Semi-Markov*

17.20-17.40 **E. Borgonovo**, L. Peccati

*What Drives Default Risk? A Quantitative Approach to Default Probability Monitoring*

17.40-18.00 **F. Barsotti**, M.E. Mancino, M. Pontier

*Corporate Debt Value with Switching Tax Benefits*

18.00-18.20 A. Battauz, **A. Sbuelz**

*Reaching Nirvana with a Defaultable Stock*

18.20-18.40 **M. Nardon**, P. Pianca

*Implied Volatilities of American Options with Cash Dividends: An Application to Italian Derivatives Market (IDEM)*

18.40-19.00 **R. Pelessoni**, P. Vicig

*Generalising the Pari-Mutuel Model*

17.00-19.00 **Matematica attuariale**

Aula M (coordina: A.R. Bacinello)

17.00-17.20 **R. Melis**, A. Trudda

*Some Remarks on Demographic Risks in Pay-As-You-Go Pension Funds*

17.20-17.40 **M. Di Giacinto**, B. Højgaard, E. Vigna

*Optimal Time of Annuitization in the Decumulation Phase of a Defined Contribution Pension Scheme*

17.40-18.00 M. Di Giacinto, **S. Federico**, F. Gozzi, E. Vigna

*Constrained Portfolio Choices in the Decumulation Phase of a Pension Plan*

18.00-18.20 **E. Vigna**

*Mean-Variance Inefficiency of CRRA and CARA Utility Functions for Portfolio Selection in Defined Contribution Pension Schemes*

18.20-18.40 **D. Benedetti**, B. Giacomello

*Un modello di scelta tra capitale e rendita nei fondi pensione italiani*

18.40-19.00 M. Micocci, G. Masala, G. Cannas

*Public and Private DC Pension Schemes, Termination Indemnities and Optimal Funding of Pension System in Italy*

## Giovedì 3 settembre

### 9.00-11.00 **Finanza matematica**

Aula Co (coordina: L. Gardini)

9.00-9.20 G. Henryk, E. Moretto, **A. Tagliani**

*Application of Mellin Transform to a Black-Scholes Equation with a Discontinuous Payoff Function*

9.20-9.40 M. Corazza, G. Fasano, **R. Gusso**

*Portfolio Selection with an Alternative Measure of Risk: A Particle Swarm Optimization Approach*

9.40-10.00 M. Costabile, I. Massabò, **E. Russo**

*A Lattice Model for Pricing Interest-Sensitive Claims in a HJM Framework*

10.00-10.20 G. Bertocchi, M. Brunetti, **C. Torricelli**

*Marriage and Other Risky Assets: A Portfolio Approach*

10.20-10.40 A. Attalienti, **R.M. Mininni**, I. Rasa

*Gamma-Type Operators and the Black-Scholes Semigroup*

10.40-11.00 F. Tramontana, **L. Gardini**, F. Westerhoff

*On the Complicated Price Dynamics of a Simple One-Dimensional Discontinuous Financial Market with Heterogeneous Trades*

### 9.00-10.20 **Ottimizzazione**

Aula I (coordina: A. Consiglio)

9.00-9.20 **F. Mignanego**, L. Pusillo, S. Tijs

*Approximate Solutions in Multicriteria Situations*

9.20-9.40 **G. Consigli**, G. Iaquina, F. Sandrini

*SP-Based Dynamic Corporate Portfolio Management During a Credit Crisis*

9.40-10.00 M.T. Vespucci, **F. Maggioni**, M. Bertocchi, M. Innorta

*A Model for Coordinating Uncertain Wind Power Production and Pumped Storage Hydro Production*

10.00-10.20 **A. Consiglio**, A. Staino

*A Stochastic Programming Model for the Optimal Issuance of Government Bonds*

### 9.00-11.00 **Teoria delle decisioni**

Aula M (coordina: B. Matarazzo)

9.00-9.20 C. Bertini, G. Gambarelli, **A. Uristani**

*Indices of Collusion among Judges and an Anti-Collusion Average*

9.20-9.40 **R. Ghiselli Ricci**

*Aggregation Operators in Reputation Systems*

9.40-10.00 M. Brunelli, L. Canal, **M. Fedrizzi**

*Indici di consistenza delle preferenze: uno studio comparativo*

10.00-10.20 **B. Cavallo**, L. D'Apuzzo

*Some Issue on the Pairwise Comparison Matrices over Abelian Linearly Ordered Groups*

10.20-10.40 S. Greco, **F. Rindone**

*The Bipolar Cumulative Prospect Theory*

10.40-11.00 S. Greco, **B. Matarazzo**, R. Slowinski

*DARWIN: Dominance-based rough set Approach to handling Robust Winning solutions in INteractive multiobjective optimization*

11.00-11.30 *Pausa caffè*

### 11.30-12.30 **D. Tsomocos, Analysis of Monetary and Financial Stability: A New Paradigm**

Aula Co (coordina: C. Torricelli)

12.30-14.00 *Colazione di lavoro*

**14.00-15.40 Finanza matematica**

Aula Co (coordina: G. Pacelli)

14.00-14.20 **R. Agliardi**

*A Comprehensive Option Pricing Formula in a Lévy Framework*

14.20-14.40 **A. Leccadito**, R. Tunaru, G. Urga

*CMCDS Premia Implicit in the Term Structure of Corporate CDS Spreads*

14.40-15.00 **L.V. Ballestra**, G. Pacelli

*A New Method to Price Double-Barrier Options*

15.00-15.20 **S. Muzzioli**

*The Information Content of Option Based Forecasts of Volatility: Evidence from the DAX Index Options Market*

15.20-15.40 L. Monti, **A. Pascucci**

*Free Boundary Problem for Arithmetic Amerasian Options*

**14.00-15.00 Metodi matematici dell'Economia**

Aula I (coordina: M. Galeotti)

14.00-14.20 **A. Agliari**

*Border Collision Bifurcation and Complex Dynamics in a Two-Sector Growth Model*

14.20-14.40 **B. Venturi**

*On the Structure of the Solutions of a Two-Parameter Family of Continuous Time Endogenous Growth Models*

14.40-15.00 A. Antoci, **M. Galeotti**, P. Russu

*Over-Exploitation of Open-Access Natural Resources and Global Indeterminacy in an Economic Growth Model*

**15.00-15.40 Teoria delle decisioni**

Aula I (coordina: E. Castagnoli)

15.00-15.20 I. Gilboa, **F. Maccheroni**, M. Marinacci, D. Schmeidler

*Objective and Subjective Rationality in a Multiple Prior Model*

15.20-15.40 A. Collecchio, **M. LiCalzi**

*Preference-Based Categorizations for Large Spaces*

**14.00-15.40 Ottimizzazione e competizione nel marketing**

Aula M (coordina: B. Viscolani)

14.00-14.20 M. Bardi, A. Cesaroni

*Differential Games with Random Parameters*

14.20-14.40 D. Dragone, L. Lambertini, **A. Palestini**

*Hamiltonian Potential Functions for Differential Games*

14.40-15.00 A. Buratto, **G.E. Valente**

*When Does a Royalty Clause with a Guarantee Lead to a No-Equilibrium Situation in a Licensing Contract?*

15.00-15.20 **A. Buratto**

*Time Consistent Advertising and Price Strategies in a Licensing Contract*

15.20-15.40 **L. Grosset**

*Advertising Events in a Competitive Framework*

15.40-16.10 *Pausa caffè*

**16.10-17.10 Finanza matematica**

Aula Co (coordina: S. Sanfelici)

16.10-16.30 C. Chiarella, T. He, **P. Pellizzari**

*A Dynamic Analysis of the Microstructure of Moving Average Rules in a Double Auction Market*

16.30-16.50 S. Centanni, **M. Furgeri**, M. Mandarà

*A Markov Switching ACD Model for Ultra-High-Frequency Data*

16.50-17.10 M.E. Mancino, **S. Sanfelici**

*Integrated Quarticity Estimation from High Frequency Data*

**16.10-17.10 Matematica attuariale**

Aula I (coordina: R. Manca)

16.10-16.30 **G. D'Amico**

*Semi-Markov Interest Rate Models with Applications to Insurance*

16.30-16.50 **S. Silla**, D. Pennesi

*BSDE Based Approach to Optimal Annuitization and Asset Allocation*

16.50-17.10 **R. Manca**

*A Monte Carlo Semi-Markov Claim Reserve Model*

**16.10-17.10 Ottimizzazione e competizione nel marketing**

Aula M (coordina: B. Viscolani)

16.10-16.30 **S. Faggian**

*Equilibrium Points for Optimal Investment in Age-Structured Goodwill*

16.30-16.50 R. Boucekkine, **G. Fabbri**, F. Gozzi

*Maintenance and Investment: Complements or Substitutes? A Reappraisal*

16.50-17.10 **B. Viscolani**, G. Zaccour

*Advertising Strategies in a Differential Game with Negative Competitor's Interference*

**17.10-18.40 Assemblea A.M.A.S.E.S.**

20.30 *Cena sociale*

## Venerdì 4 settembre

### 9.00-11.00 **Finanza matematica**

Aula Co (coordina: C. Ceci)

9.00-9.20 M. Bedendo, **C. Tebaldi**

*Financial Derivatives Marketed to Unsophisticated Investors: Efficient Contract Valuation*

9.20-9.40 **P. Ciurlia**

*On the Evaluation of European Continuous-Installment Options*

9.40-10.00 **L. Anzilli**, L. Cananà, M.A. Congedo, D. Scolozzi

*Pricing Perpetual American Put Options with Decreasing Elasticity in Payoff Functions*

10.00-10.20 **G. Villani**

*Valuation of R&D Investment Opportunities with the Threat of Competitors Entry in Real Option Analysis*

10.20-10.40 A. Danesin, **B. Giacomello**

*Valutazione di operazioni finanziarie e condizioni di non arbitraggio sui mercati internazionali*

10.40-11.00 **C. Ceci**, A. Gerardi

*Indifference Valuation via Backward SDE's Driven by Poisson Martingales*

### 9.00-11.00 **Matematica attuariale**

Aula M (coordina: N. Savelli)

9.00-9.20 **O. Le Courtois**, H. Nakagawa

*Surrender Risk and the Default of Insurance Companies*

9.20-9.40 M. Costabile, M. Gaudenzi, I. Massabò, **A. Zanette**

*Evaluating Fair Premiums of Equity-Linked policies with Surrender Option in a Bivariate Model*

9.40-10.00 **D. Canestraro**, M.M. Dacorogna

*Tails, Risk Measures, Tail Dependencies and their Influence on Risk Based Capital*

10.00-10.20 **S. Forte**, M. Ialenti, M. Pirra

*Internal Risk Models for Non Life Insurers: The Choice of the Assessment Model*

10.20-10.40 N. Savelli, **G.P. Clemente**

*A Collective Risk Model for Outstanding Claims Reserve Distribution*

10.40-11.00 **G.A. Spedicato**

*Recent Legislative Changes in Italian Third Party Motor Liability Insurance. Actuarial Considerations.*

### 9.00-11.00 **Metodi matematici dell'Economia**

Aula I (coordina: C. Mamma)

9.00-9.20 **S. Patrì**

*A Stochastic Model for the Welfare in a Home Country with Immigration*

9.20-9.40 A. Bucci, H.E. Kunze, **D. La Torre**

*Parameter Identification, Population and Economic Growth in an Extended Lucas and Uzawa-Type Two Sector Model*

9.40-10.00 **S. Brianzoni**, C. Mamma, E. Michetti

*Simple Beliefs and Complex Dynamics in the Cobweb Model*

10.00-10.20 E. Allevi, **G. Oggioni**, S. Schaible, Y. Smeers

*Quasi Variational Formulation of Market Coupling in Restructured Electricity Market*

10.20-10.40 **M. Ferrara**, L. Guerrini

*The Green-Solow Model with Logistic Population Change*

10.40-11.00 A. Antoci, A. Naimzada, **M. Sodini**

*Non-Linear Dynamics in an OGM Model with an Environmental Good*

11.00-11.30 *Pausa caffè*



**11.30-13.30 Metodi matematici dell'Economia**

Aula I (coordina: P. Pianca)

- 11.30-11.50 **A. Cornaro**, A. Agliari  
*Determinacy and Sunspots in a Nonlinear Monetary Model*
- 11.50-12.10 M. Bambi, G. Fabbri, **F. Gozzi**  
*Optimal Policy and Consumption Smoothing Effects in the Time-to-Build AK Model*
- 12.10-12.30 R. Boucekkine, P. Crifo, **C. Mattalia**  
*Technological Progress, Organizational Change and the ICT Revolution*
- 12.30-12.50 E. Barucci, **M. Tolotti**  
*The Dynamics of Social Interaction with Agents' Heterogeneity*
- 12.50-13.10 M.G. Graziano, **M. Romaniello**  
*Linear Cost Share Equilibria and the Veto Power of the Grand Coalition*
- 13.10-13.30 **I. Foroni**, M. Zenga  
*Dynamic Pricing for Hotel Room Inventory*

**11.30-13.30 Finanza matematica**

Aula Co (coordina: T. Vargiolu)

- 11.30-11.50 **L. Mercuri**  
*A New Affine Stochastic Volatility Model with Normal Variance-Mean Mixture*
- 11.50-12.10 **V. Prezioso**, W. Runggaldier  
*Interest Rate Derivatives Pricing When the Short Rate Is a Continuous Time Finite State Markov Process*
- 12.10-12.30 J. Da Fonseca, **M. Grasselli**, F. Ielpo  
*Riding on the Smiles I.*
- 12.30-12.50 **G. Callegaro**, A. Sagna  
*An Application to Credit Risk of an Hybrid Monte Carlo-Optimal Quantization Method*
- 12.50-13.10 C. Chiarella, F. D'Ippoliti, **E. Moretto**, S. Pasquali  
*Valuation of European and American Options with Discrete Dividends in a SVIJ*
- 13.10-13.30 M. Rosestolato, **T. Vargiolu**, G. Villani  
*Robustness for Path-Dependent Volatility Models*