

PROGRAM

All lecture rooms on ISEG, Building Quelhas, floors 2 and 4.

Floor 2: Auditorium Caixa Geral de Depósitos (AUD. CGD)

Floor 4: Amphitheatre Novo Banco (**AMPH. NB**); Amphitheatre 1 (**AMPH. 1**), Amphitheatre 3 (**AMPH. 2**), Amphitheatre 4 (**AMPH. 4**)

Tuesday, September 2

At floor 2, AUD. CGD

8:15-9:00 **Registration**

9:00-9:25 **Opening Session**

9:30-10:10 Plenary 1 – **Martin Schweizer:** *Dynamic monotone mean-variance portfolio optimisation with independent returns*

10:20-11:00 Plenary 2 – **Emmanuel Gobet:** *Quantitative modelling of risks in Decentralized Finance*

Chair morning session:
Ernst Eberlein

11:10-11:35 **Coffee Break**

11:35-13:15

At floor 4

Parallel Sessions 1

Session 1A – MS 1 – Memory in Quantitative Finance I Room: AMPH. 1 Chair: Eduardo Abi Jaber	Session 1B – ThS 1 – Stochastic models for sustainability Room: AMPH. NB Chair: Nuno Brites	Session 1C – ThS 2 – Machine Learning Approaches in Financial Stochastics Room: AMPH. 3 Chair: Álvaro Leitao Rodríguez
Sergio Pulido: <i>Polynomial Volterra processes</i>	Sven Karbach: <i>Semi-static hedging of Volumetric Risk in Energy Markets</i>	Jean-Loup Dupret: <i>Deep Learning for Continuous-time Stochastic Control with Jumps</i>
Elie Attal: <i>Simulating Affine Volterra Processes via Inverse Gaussian</i>	João Brazão: <i>A Real Option Model for Harvesting</i>	Aleksandar Arandjelovic: <i>Algorithmic Strategies in Continuous-Time Hedging and Stochastic Integration</i>
Christian Bayer: <i>American option pricing in rough volatility models.</i>	Rodrigo Graça: <i>A Methodological Revisit of Green Bond Premium</i>	Diogo Franquinho: <i>Neural network empowered liquidity pricing in a two-price economy under conic finance settings</i>
Alessandro Bondi – <i>Fredholm Approach to Nonlinear Propagator Models</i>	Lionel Sogouei: <i>Impact of the carbon price on credit portfolio's loss with stochastic collateral</i>	Daria Sakhandia: <i>Optimal Consumption Policy in a Carbon-Conscious Economy: A Machine Learning Approach</i>

13:15-14:30 **Lunch at Rooftop***At floor 2, AUD. CGD*14:35-15:15 Plenary 3 – **Roxana Dumitrescu**: *Advances in the Linear Programming Approach for Mean-Field Games and Multi-Scale MFGs with Common Noise*15:25-16:05 Plenary 4 – **Matthias Ehrhardt**: *A novel Space Mapping approach for the calibration of financial models***Chair afternoon session:**
João Guerra16:15-16:40 **Coffee Break**16:45-18:25 *At floor 4***Parallel Sessions 2**

Session 2A – MS 2 - Memory in Quantitative Finance II <i>Room: AMPH. 1</i> <i>Chair: Eduardo Abi Jaber</i>	Session 2B – MS 3 - ECMI SIG: Computational Methods for Finance and Energy Markets I <i>Room: AMPH. NB</i> <i>Chair: Carlos Vázquez</i>	Session 2C – MS 4 - Advances on mean-field theory with applications to generative AI and energy transition <i>Room: AMPH. 3</i> <i>Chair: Roxana Dumitrescu</i>	Session 2D – ThS 3 – Stochastic models I <i>Room: AMPH. 4</i> <i>Chair: Raquel Gaspar</i>
Eyal Neumann : <i>Stochastic Graphon Games with Memory</i>	Gianluca Fusai : <i>Navigating Supply Shocks: Sector Resilience and Production Prices through Stochastic Input-Output Modeling</i>	Luciano Campi : <i>Continuous-time persuasion by filtering</i>	Roberto Baviera : <i>Is Spearman's ρ a robust measure of correlation for financial time series?</i>
Leo Parent : <i>The discrete-time 4-factor PDV model: calibration under \mathcal{P} and \mathcal{Q}</i>	Yannick Becker : <i>Portfolio Optimization under Return Uncertainty: From Sensitivity to Robustness</i>	Quentin Jacquet : <i>A Rank-Based Reward between a Principal and a Field of Agents: Application to Energy Savings</i>	Pietro Manzoni : <i>The role of expert judgement in insurance internal model for operational risk</i>
Dimitri Sotnikov : <i>Martingale property and moment explosions in signature volatility models</i>	Joshua A. Dekker : <i>Optimal stopping with randomly arriving opportunities to stop</i>	Mehdi Talbi : <i>Sannikov's contracting problem with many Agents</i>	Vesna Rajic : <i>Application of Generalized Linear Models in Assessing the influence of Acquisition Costs on Insurance Premiums</i>
Eduardo Abi Jaber : <i>Signature Approach for Path dependent Hedging with Frictions</i>	Edouard Motte : <i>The Volterra Stein-Stein model with stochastic interest rates</i>	Yufei Zhang : <i>Continuous-time mean field games: a primal-dual characterization</i>	Pavel Gapeev : <i>Bayesian quickest double disorder detection problems with linear delay penalty</i>

18:35 **Welcome drink at Rooftop**

Wednesday, September 3

At floor 2, AUD. CGD

9:00-09:40	Plenary 5 – Bruno Dupire : <i>Some Financial Applications of the Functional Itô Calculus</i>	Chair session: Laura Ballotta
9:50-11:00 (20 + 10 +40)	Celebration in honour of Prof. Albert Shiryaev + Plenary 6 – Albert Shiryaev : <i>On parameter estimation of diffusion processes by maximum likelihood method</i>	Chair celebration: Martin Schweizer

11:10 –11:35 **Coffee Break**

11:35-13:15

At floor 4

Parallel Sessions **3**

Session 3A – MS 5 – ECMI SIG: Computational Methods for Finance and Energy Markets II Room: AMPH. NB Chair: Daniel Sevcovic	Session 3B – MS 6 - Diffusion models with dependency structure and applications Room: AMPH. 1 Chair: Armand Bernou	Session 3C - ThS 4 – Mean Field Games, Stochastic Control and Portfolio Optimization I Room: AMPH. 3 Chair: António Santos
Oliver Rúas-Barrosa : <i>Power Purchase Agreements: a Renewable Energy approach</i>	Yating Liu : <i>Supervised Classification for Interacting Particles</i>	Hugo Ramirez : <i>Benchmarking of Index Funds with Transaction Costs</i>
Bianca Marin Moreno : <i>Online Convex Reinforcement Learning and Applications to Energy Management Problems</i>	Loic Bethencourt : <i>Brownian Particles Controlled by their Occupation Measure</i>	Javier Garcia : <i>Daily leverage and long-term investing using leveraged exchange traded funds</i>
Jörg Müller : <i>Oil as a spoilsport in ESG investing? An analysis of the correlation effects of stocks in the ESG spectrum</i>	Armand Bernou : <i>Convex Order for the McKean- Vlasov Equation with Common Noise and Applications</i>	Amal Omrani : <i>Beyond the Leland strategies</i>
	Ying Jiao : <i>An Efficient Shared Socioeconomic Pathways Based Methodology for Assessing Climate Risks of a Large Credit Portfolio</i>	

13:15-14:30 **Lunch at Rooftop**

At floor 2, AUD. CGD

14:35-15:15 Plenary 7 – **Nizar Touzi**: *Model risk hedging and path-dependent distributionally Robust Control*

Chair afternoon session:
Carlos Vázquez

15:25-16:05 Plenary 8 – **Peter Tankov**: *Climate risks, tipping points and emission reduction*

16:15-16:40 **Coffee Break**

16:45-18:25

At floor 4

Parallel Sessions 4

Session 4A – MS 7 – ECMI SIG: Computational Methods for Finance and Energy Markets III <i>Room: AMPH. NB</i> <i>Chair: Matthias Ehrhardt</i>	Session 4B – MS 8 – Time-Inhomogeneous Lévy (Additive) Processes: Applications in Finance and Energy <i>Room: AMPH. 1</i> <i>Chair: Michele Azzone</i>	Session 4C – ThS 5 – Stochastic Models II <i>Room: AMPH. 3</i> <i>Chair: Carlos Oliveira</i>
Michael Günther : <i>Port-Hamiltonian Systems in Quantitative Finance</i>	Michele Azzone : <i>Additive normal tempered stable processes and additive subordination for equity derivatives</i>	Maxime Guellil : <i>Fourier-Laplace Transform Discontinuities and Computation in the Volterra Stein-Stein Model: A Fredholm–Wishart Approach</i>
Álvaro Leito Rodríguez : <i>Deep Joint Learning valuation of Bermudan Swaptions</i>	Laura Ballotta : <i>Multivariate Additive Subordination with Applications in Finance</i>	Gonçalo dos Reis : <i>Simulation of mean-field SDEs: some recent results</i>
Jing Wang : <i>Controllable Generation of Implied Volatility Surfaces with Variational Autoencoders</i>	Guixin Liu : <i>Neural Term Structure of Additive Process for Option Pricing</i>	Miguel Reis : <i>Stochastic Differential Equations Harvesting Models: Simulation and Numerical Solution</i>
Ray Ruining Wu : <i>Efficient high-order smoothing methods for rainbow options on sparse grids</i>	Marco Vitelli : <i>Overcoming misconceptions about local volatility: exact prices lead to sound continuous Markovian models</i>	Mohamed El-Beltagy : <i>Basis Development of the Fractional Wiener Chaos Expansions for the Analysis of Stochastic Models Driven by Fractional Brownian Motion</i>

Thursday, September 4

At floor 2, AUD. CGD

9:00-09:40 Plenary 9 – **Carlos Vázquez:** *Some recent advances in the pricing of renewable energy certificates and some derivatives*

Chair session:
Matthias Ehrhardt

9:50-11:00 **Celebration in honour of Prof. Ernst Eberlein** +
(20 + 10 +40) Plenary 10 – **Ernst Eberlein:** *The term structure of implied correlations between S&P and VIX markets*

Chair celebration:
Thorsten Schmidt

11:10 –11:35 **Coffee Break**

11:35-13:15 **At floor 4**

Parallel Sessions 5

Session 5A – MS 9 - Advanced Pricing Models and Numerical Approaches for Emission Allowances and Renewable Energy Certificates Room: AMPH. NB Chair: J.-F. Chassagneux	Session 5B – MS 10 - Risk management for financial and real assets Room: AMPH. 1 Chair: Ana Monteiro	Session 5C – MS 11 - Machine Learning and Information Geometry in Finance Room: AMPH. 3 Chair: Amine Aboussalah	Session 5D – ThS 6 – Mean Field Games, Stochastic Control and Portfolio Optimization II Room: AMPH. 4 Chair: Manuel Guerra
Stéphane Crépey: Sensitivity Analysis of Emissions Markets: A Discrete-Time Radner Equilibrium Approach	Pedro Godinho: Regression-Based Estimation of State-Dependent Volatility in Project Simulation Models	Leonard Wong: Macroscopic Properties of Equity Markets: Stylized Facts and Portfolio	Josha Dekker: Stochastic optimal control with randomly arriving control moments
Liam Welsh: <i>Modelling Equilibrium Behaviour in Solar REC and Offset Credit Markets</i>	Nuno Silva: <i>Using Adaptive LASSO to Improve Portfolio Strategies</i>	Abderrahmane Abbou: <i>Dynamic Intervention Policy for Financially Distressed Firms with Noisy Returns</i>	Tao Pang: <i>Optimal Portfolio Choice with Comfortable Consumption</i>
Yassin El-Hatri: <i>Modelling the Role of Hedgers and Speculators</i>	Ana Monteiro: <i>Estimating default intensity using Credit Default Swap (CDS) data</i>	Amine Aboussalah: <i>Robust Financial Modeling: A Principled Framework for Generative Data Augmentation</i>	Christoph Czichowsky: <i>Duality theory for utility maximisation in Volterra kernel models for transient price impact</i>
	António Santos: <i>Hamiltonian Monte Carlo simulations to estimate extended stochastic volatility models within a time-deformed intraday framework</i>		Sturmius Tuschmann: <i>Stochastic Graphon Games with Memory</i>

13:15-14:30 **Lunch** *at Rooftop*

At floor 2, AUD. CGD

14:35-15:15 Plenary Talk 11 – **Jean-François Chassagneux**: *An optimal transport approach to multiple quantile hedging problems*

Chair session:
Daniel Sevcovic

15:20-15:45 **Coffee-Break**

16:00 **Walk from ISEG to Cais da Rocha de Conde de Óbidos** (20 min)

16:45 - 19:00 **Scenic 2-hour Tagus River cruise**

19:45 **Conference dinner**

Friday, September 5

At floor 2, AUD. CGD

9:00-09:40 Plenary 12 – **Peter Spreij**: *Polynomial approximation of discounted moments*

Chair morning session:
João Janela

9:50-10:30 Plenary 13 – **Daniel Sevcovic**: *Partial Integro-Differential Equations and their Applications in Financial Modeling*

10:40-11:05 **Coffee Break**

11:05-12:45

*At floor 4*Parallel Sessions **6**

Session 6A – MS 12- Recent approaches to Portfolio Optimization, Interest Rate Determination, Option Pricing and Intensity Graduation in Multiple State Models – Room: AMPH. NB Chair: Manuel L. Esquivel	Session 6B – ThS 7 – Stochastic models III Room: AMPH. 1 Chair: Gonalo dos Reis	Session 6C– ThS 8 – Portfolio Management, Insurance and investments Room: AMPH. 3 Chair: Alexandra Moura
Marta Faias: <i>Measuring the Impact of Socially Responsible Investments on Portfolio Performance Using the Shapley Value</i>	Josep Vives: <i>Computation of Greeks under rough Volterra stochastic volatility models using Malliavin Calculus</i>	Martin Arnaiz: <i>A Stochastic Mirror Descent Algorithm for Risk Budgeting Portfolios</i>
Raquel Gaspar: <i>Option Pricing: quality versus quantity in the era of Big Data</i>	Lilian Hu: <i>New perspectives on analytic solvability of stochastic volatility models</i>	Alessandro Staino: <i>Minimum capital requirement for non-life insurance with risk budgeting portfolios</i>
Gracinda Guerreiro: <i>Risk-Adjusted Estimation and Graduation of Transition Intensities for Disability and Long-Term Care Insurance: A Multi-State Model Approach</i>	Carlos Gl3ria: <i>Robust Equilibrium Asset and Option Pricing</i>	Jelena Stanojevic: <i>Assessing the Efficiency of Insurance Companies Using Fuzzy Data Envelopment Analysis: Evidence from Serbia</i>
Manuel L. Esquivel: <i>On Model Improvement Algorithms: an Application to Interest Rates Determination</i>	Milos Bozovic: <i>Intraday Jumps and ODTE Options:Pricing and Hedging Implications</i>	Dragana Radojicic: <i>Benford’s Law: Distributional Properties, Simulations, and Real-World Conformity Tests</i>

At floor 2, AUD. CGD

12:50-13:15

Closing Session

13:15-14:30

Lunch and Port Wine Farewell *at Rooftop*