

mathematics & finance:

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Research in Options

Angra dos Reis, Rio de Janeiro, Brazil - November 27th to December 2nd, 2010

CERTIFICATE

We hereby certify that, **Adriano De Cezaro**, **Fundação Universidade do Rio Grande**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Iterative Regularization to the Volatility Surface**”



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Jorge Zubelli
Organizing Committee



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We hereby certify that, **Alan De Genaro Dario, Bolsa de Mercadorias e Futuros**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Properties of Doubly Stochastic Poisson Process with affine intensity**”



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We hereby certify that, **Amel Bentata**, **École Normale Supérieure de Paris**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Forward equations for option prices in semimartingale models**”



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We hereby certify that, **Bruno Dupire, Bloomberg - NY**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Historical moments**”



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We hereby certify that, **Carole Bernard, University of Waterloo**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Timer-style options, Design, Pricing and Practice**”



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We hereby certify that, **Chris Rogers, University of Cambridge**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: "**Trading to Stops**"



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We hereby certify that, ***Cristiano Augusto Coelho Fernandes***, Pontifícia Universidade Católica do Rio de Janeiro, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “***Simulation and Prediction of Oil and Refined Products Prices in a ALM Project***”



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We hereby certify that, **Fabiana Travessini**, **Universidade Federal do Rio de Janeiro**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**A Level Set Approach to Optimal Stopping Time in American Options**”



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We hereby certify that, **Francesco Mina**, **Imperial College London**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portogalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Markov-Chain Approximation Method for a Class of Lévy Processes**”



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We hereby certify that, **Geraldo Filgueiras, F F Capital Partners**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Risk Management in the Financial Industry**”



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We hereby certify that, **Gyorgy Varga, Fce Consultoria**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: ***“Investment Decision in a New Credit Score System”***



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We hereby certify that, **Jean-Pierre Fouque**, University of California Santa Barbara, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Multiscale Stochastic Volatility Models and Perturbations Methods / Heston 1.5**”



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We hereby certify that, **João Frois Caldeira, Banco Cooperativo Sicredi S/a**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Statistical Arbitrage, Long-Short Equity Pairs Trading, A Cointegration Approach Applied to Brazilian Market Data**”



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We hereby certify that, **Julien Guyon, Societe Generale**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: "**Lecture 1: From Spot Volatilities to Implied Volatilities; Lecture 2: The Smile in Stochastic Volatility Models**"



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We hereby certify that, **Lane Hughston, Imperial College London**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Implied Density Models for Dynamics Asset Pricing**”



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We hereby certify that, **Luiza Miranyan, Bloomberg - NY**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “***Dimensionality Reduction and Factor modelling / On improving the responsiveness of the fundamental factor models***”



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We hereby certify that, **Marco Avellaneda**, Courant Institute of Mathematical Sciences, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: "**Path-Dependence Properties of Leveraged Exchange-Traded Funds: Compounding, Volatility and Option Pricing**"



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We hereby certify that, **Marco Fritelli**, **Unicersitá Degli Studi di Milano**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “***On Quasiconvex Dynamic Risk Measures***”



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We hereby certify that, **Matheus Grasselli, McMaster University**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugal, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “***The priority option: the value of being a leader in complete and incomplete mark / Asset Price Bubbles: Economics, Mathematics and Statistics***”



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We hereby certify that, **Max Oliveira de Souza, Universidade Federal Fluminense**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Evaluation of Optional Cancellation Contracts**”



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We hereby certify that, **Mike Ludkovski, University of California Santa Barbara**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Exploration and Exhaustibility in Dynamic Cournot Games**”



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We hereby certify that, **Nicolas Merener**, **Universidad Torcuato di Tella**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Efficient Monte Carlo for Discrete Variance Derivatives**”



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We hereby certify that, **Roger Lee, University of Chicago**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: "***Asymptotics of Implied Volatility***"



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We hereby certify that, **Ronnie Sircar**, **Princeton University**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Stochastic Differential Games and Applications to Energy and Consumer Goods Markets**”



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We hereby certify that, **Ruth Kaila**, **Helsinki University of Technology**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**The implied integrated variance a Bayesian approach**”



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We hereby certify that, **Steven Lillywhite**, Instituto de Matematica Pura e Aplicada, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Statistical Arbitrage in the Futures Term Structure**”



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We hereby certify that, **Sumit Kumar Sinha, Michigan State University**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: "***A Maximum Principal for Multidimensional BSDEs***"



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We hereby certify that, **Vinícius Viana Luiz Albani**, Instituto de Matematica Pura e Aplicada, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: “**Calibration of Volatility Surface with Market Data**”



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We hereby certify that, **Youngna Choi, Montclair State University**, participated in the Mathematics & Finance: Research in Options, held at Hotel Portugalo, Angra dos Reis - RJ, from November 27 to December 2, 2010 and presented the following work: ***“Financial Crisis Dynamics: Attempt to Define a Market Instability Indicator”***



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