## CERTIFICATE

We hereby certify that, *Adriano De Cezaro*, Fundação Universidade do Rio Grande, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: "*On a Tikhonov Type Regularization Method for Local Volatility Model in American Option".* 

Búzios, December 5, 2013.

Jorge Zubelli Organizing Committee





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## CERTIFICATE

We hereby certify that, *Álvaro Felipe Macías Araya*, Instituto de Matematica Pura e Aplicada, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: "*Optimal Liquidation Strategies for Portfolios under Stress Conditions*".

Búzios, December 5, 2013.

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We hereby certify that, *Ariel Levy*, Universidade Federal Fluminense, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: *"Commodities, Country Risk and Exchange Rates: Case Brazil".* 





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We hereby certify that, *David Evangelista da Silveira Junior*, Instituto de Matematica **Pura e Aplicada**, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: "*Analysis of a Multifactor Model for Commodity Forward Curves in Energy Markets*".

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### CERTIFICATE

We hereby certify that, *Douglas Machado Vieira*, Instituto de Matematica Pura e Aplicada, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: "*Statistical analysis of bid-ask models for liquid markets*".

Búzios, December 5, 2013.

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## CERTIFICATE

We hereby certify that, *Fabiana Travessini*, Fundação Universidade do Rio Grande, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: "*On a Tikhonov Type Regularization Method for Local Volatility Model in American Option".* 

Búzios, December 5, 2013.

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#### mathematics & finance: Options **Research in** Búzios, Rio de Janeiro, Brazil - November 30th to December 4th, 2013

We hereby certify that, *Lucas Farias Lima*, **Ibmec Business School**, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: "Optimal Investment Strategies for Gold Spot Contracts using Genetic Algorithms".

Búzios, December 5, 2013.

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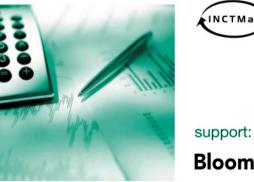


# mathematics & finance: **Research in Options** Búzios, Rio de Janeiro, Brazil - November 30th to December 4th, 2013

#### We hereby certify that, Luciana Schmid Blatter Moreira, Pontifícia Universidade Católica do Rio de Janeiro, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: "Risk Analysis of a portfolio of commodities".

Búzios, December 5, 2013.

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## CERTIFICATE

We hereby certify that, *Milene Andressa Mondek*, Pontifícia Universidade Católica do Rio de Janeiro, participated in the Mathematics & Finance: Research in Options, held at Pérola Búzios Hotel, Búzios - RJ, from November 30 to December 4, 2013 and presented the following poster: "*Pricing Options using the Hedged Monte Carlo Method*".

Búzios, December 5, 2013.

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