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Honoring Bruno Dupire's 60th Birthday

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We hereby certify that, ***Alberto Adrego Pinto***, **Universidade do Porto**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Implications of International Trade Agreements**".

Rio de Janeiro, November 29th, 2018.

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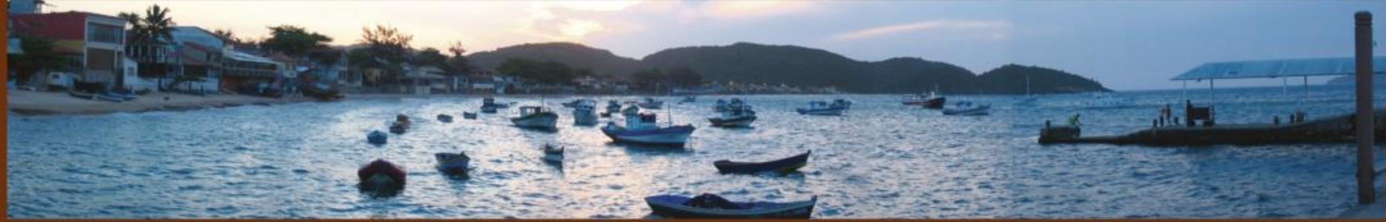

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We hereby certify that, ***Antoine Savine***, **Danske Bank**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**The influence of Bruno Dupire on derivatives markets**".

Rio de Janeiro, November 29th, 2018.

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We hereby certify that, ***Carole Bernard***, **Vrije Universiteit Brussel**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Option Implied Dependence**".

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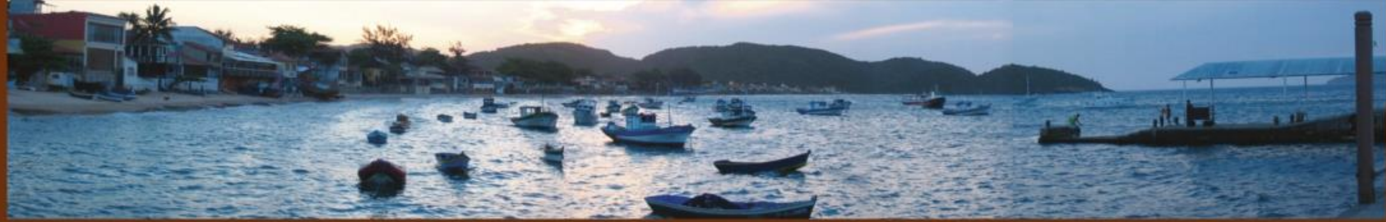

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We hereby certify that, ***Ernst Eberlein***, **Universitat Freiburg - Freiburg - Alemanha**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Multiple curve Lévy forward price model allowing for negative interest rates**".

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We hereby certify that, ***Giorgio Consigli***, **University of Bergamo**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Derivatives-based portfolio management via multistage stochastic programming**".

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We hereby certify that, ***Guillaume Blacher***, **Bank of America**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24^{th} to 28^{th}, 2018 and presented the following plenary talk: "**Fixed Point Method for Fast Smile Calibration of Hybrid Model**".

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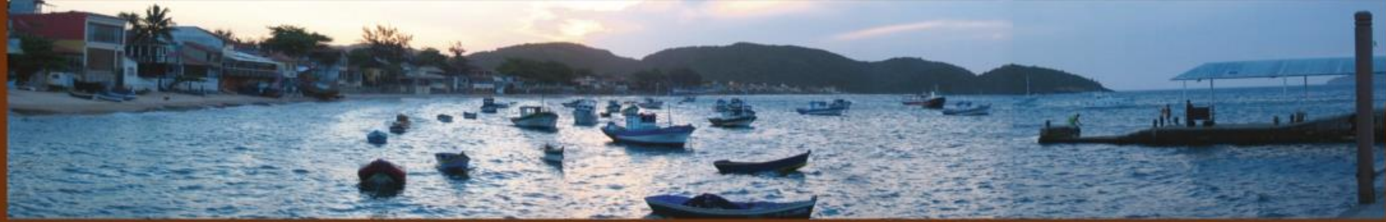

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We hereby certify that, ***Jan Obloj***, **University of Oxford**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Robust Pricing and Hedging in Practice**".

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We hereby certify that, ***Jean-Pierre Fouque***, **University of California Santa Barbara**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**On Fairness of Systemic Risk Measures**".

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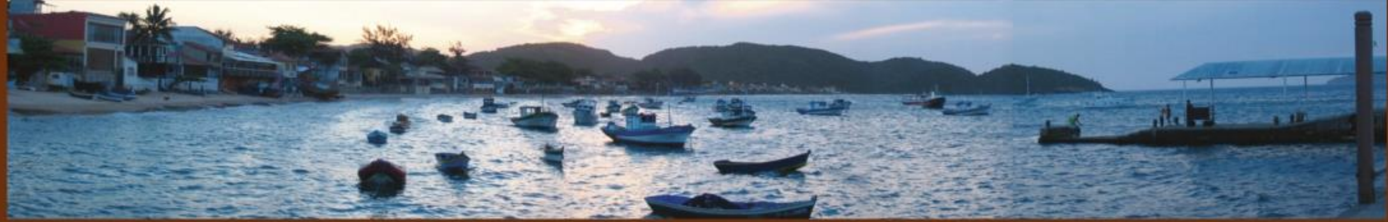

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We hereby certify that, ***Josef Teichmann***, **Eth-Zentrum**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24^{th} to 28^{th}, 2018 and presented the following plenary talk: "**Scenario generation by machine learning techniques**".

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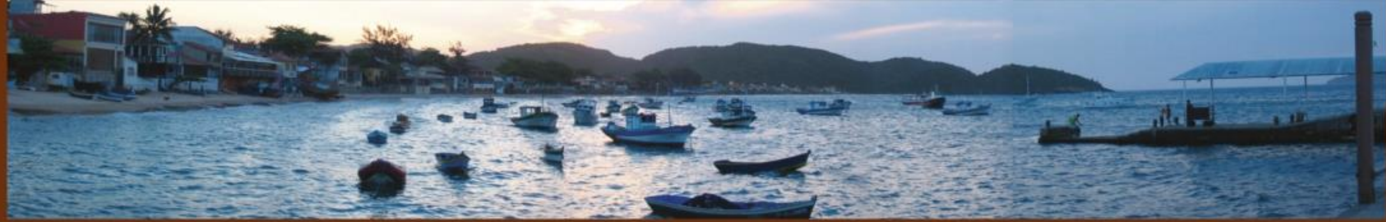

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We hereby certify that, ***Julien Guyon***, **Bloomberg - NY**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**On the Joint Calibration of SPX and VIX Options**".

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We hereby certify that, ***Lakshithe Wagalath***, **Iéseg School of Management**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24^{th} to 28^{th}, 2018 and presented the following plenary talk: "**Strategic Fire-Sales and Price-Mediated Contagion in the Banking System**".

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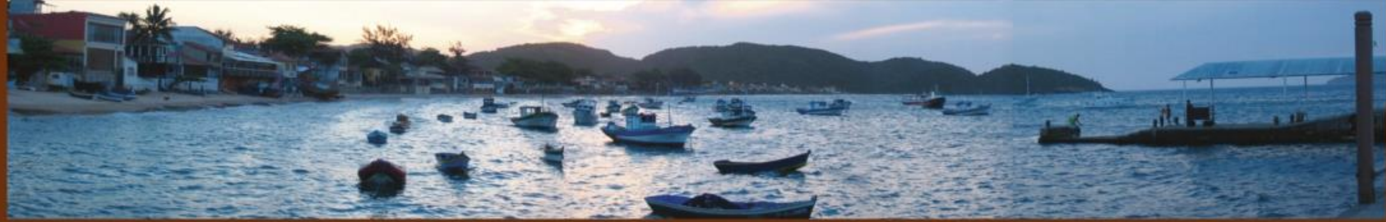

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We hereby certify that, ***Lane Hughston***, **Goldsmiths, University of London**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**On the Determination of the Lévy Exponent in Asset Pricing Models**".

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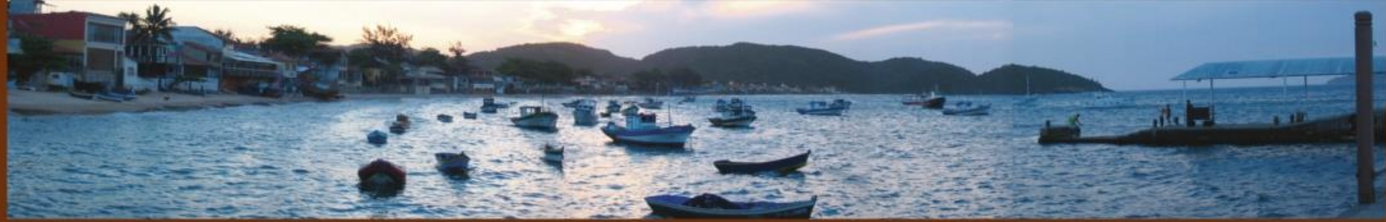

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We hereby certify that, ***Martin Schweizer***, **Swiss Federal Institute of Technology**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Dynamic mean-variance optimization problems with deterministic information**".

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We hereby certify that, ***Martino Grasselli***, **Padova University**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Fast Hybrid Schemes for Fractional Riccati Equations (Rough is not so Tough)**".

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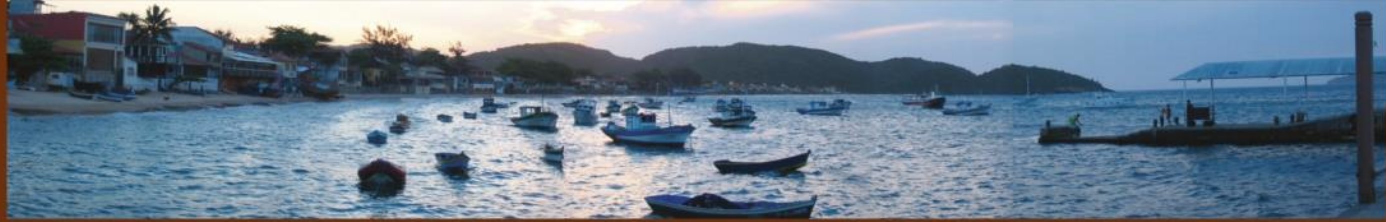

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We hereby certify that, ***Matheus Grasselli***, **Mcmaster University**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Climate Change, Finance, and Macroeconomics**".

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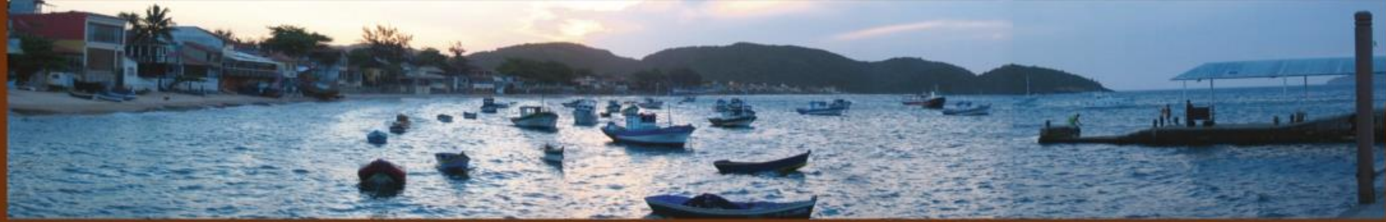

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We hereby certify that, ***Max Oliveira de Souza***, **Universidade Federal Fluminense**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24^{th} to 28^{th}, 2018 and presented the following plenary talk: "**Pricing options with non-uniform Fourier transform**".

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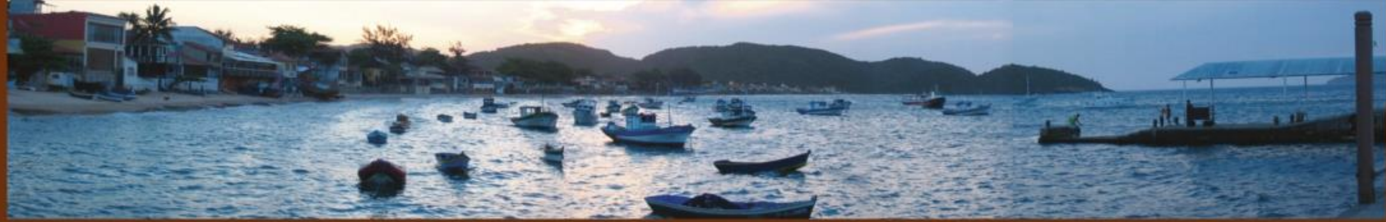

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We hereby certify that, ***Raphael Douady***, **Stony Brook University**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Regime Switching Market Evolution and Calibration, Relations to Polymodels**".

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We hereby certify that, ***Stephane Crepey***, **Université Evry Val d´Essonne**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Uncertainty Quantification for XVA Applications**".

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We hereby certify that, ***Uwe Schmock***, **Vienna University of Technology**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24th to 28th, 2018 and presented the following plenary talk: "**Geometry of Distribution-Constrained Optimal Stopping Problems**".

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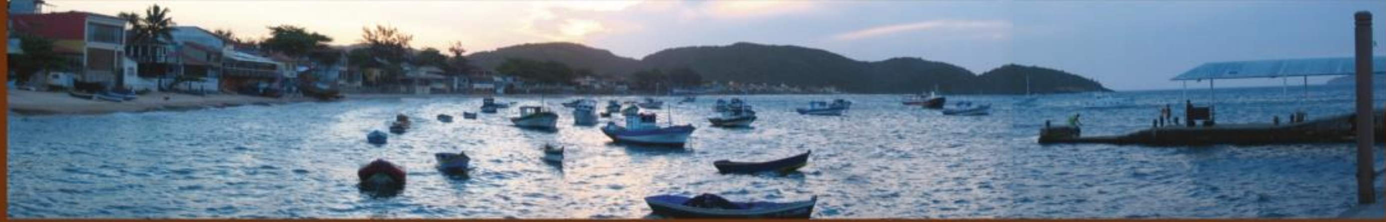

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We hereby certify that, ***Yuri Fahham Saporito***, **Fundação Getúlio Vargas**, participated in the Mathematics & Finance: Research in Options 2018, held at Atlântico Búzios Hotel, Búzios - Rio de Janeiro, from November 24^{th} to 28^{th}, 2018 and presented the following plenary talk: "**Dupire Calculus**".

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