



Búzios, Rio de Janeiro, Brazil - November 24th to 28th, 2018 **Honoring Bruno Dupire's 60th Birthday**

CERTIFICATE

We hereby certify that, **Bruno Dupire**, **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 minicourse: "25 years of Local Volatility and 10 years of Functional Itô calculus".

Rio de Janeiro, November 29th, 2018.

Jorge P. Zubelli **Organizing Committee**



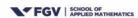


Support

















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CERTIFICATE

We hereby certify that, *Jim Gatheral*, City University of New York, 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 minicourse: "Rough volatility".

Rio de Janeiro, November 29th, 2018.

Jorge P. Zubelli Organizing Committee



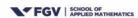




















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CERTIFICATE

We hereby certify that, *Sebastian Jaimungal*, **University of Toronto**, 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 minicourse : "Machine Learning in Algorithmic Trading".

Rio de Janeiro, November 29th, 2018.

Jorge P. Zubelli Organizing Committee





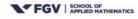
Support



















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CERTIFICATE

We hereby certify that, *Teemu Pennanen*, **King's College 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 minicourse : "**Incomplete markets**".

Rio de Janeiro, November 29th, 2018.

Jorge P. Zubelli Organizing Committee





Support







