

We hereby certify that, **Ewan Mackie**, Instituto de Matematica Pura e Aplicada, participated in the Mathematics & Finance: Research in Options, held at Hotel Atlântico, Búzios - RJ, from December 7 to 12, 2012 and presented the following poster: “**A Long-Memory Model for the Term-Structure of Commodity Futures**”.



Búzios, December 12, 2012.

A handwritten signature in black ink, appearing to read 'JZ'.

Jorge Zubelli
Organizing Committee



We hereby certify that, **Jamil Kehdi Pereira Chevitaresh**, Instituto Brasileiro de Mercados e Capitais, participated in the Mathematics & Finance: Research in Options, held at Hotel Atlântico, Búzios - RJ, from December 7 to 12, 2012 and presented the following poster: “**PCA Explanatory Power in Stochastic Interest Rate Models**”.



Búzios, December 12, 2012.

A handwritten signature in black ink, appearing to be 'JZ' or similar, written over a light background.

Jorge Zubelli
Organizing Committee

