

Hong Kong - Singapore joint Seminar Series in Financial Mathematics/Engineering

Unbiasing and robustifying implied volatility calibration in a cryptocurrency market with large bid-ask spreads and missing quotes

Professor Emmanuel Gobet
Ecole Polytechnique, France

Abstract

We design a novel calibration procedure that is designed to handle the specific characteristics of options on cryptocurrency markets, namely large bid-ask spreads and the possibility of missing or incoherent prices in the considered data sets. We show that this calibration procedure is significantly more robust and accurate than the standard one based on trade and mid-prices.

About the speaker

Emmanuel Gobet graduated from Ecole Polytechnique - Paris in 1995, he got a PhD degree in probability at University Paris Diderot. He took different academic positions at University Pierre et Marie Curie, Grenoble Institute of Technology and he is currently Professor at Ecole Polytechnique.

His expertise is related to Monte Carlo simulations, Machine learning and data science, extremes, risk management, stochastic modelling with applications in Climate change, Energy, Finance. He has written more than 100 papers in international journals and 3 books. He is the scientific leader of the Chair Stress Test, between BNPP Paris and Ecole Polytechnique and he is a Scientific Advisor to Kaiko, a major digital finance data provider.

Date

14 Sep 2022(Wednesday)
(HK Time)

Time

4:00pm – 5:00pm (HK
Time)

Zoom

<https://cityu.zoom.us/j/96559090075?pwd=Q0tjdJlg4d1BPNzFrMk92MTJDWlVZZz09>

Meeting ID:

965 5909 0075

Passcode:

230412