

International Summit on Industrial Engineering

December 08-10, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA

Asset price models with a change point

Qinghua Li³, Claudio Fontana¹, Zorana Grbac² and Monique Jeanblanc¹

¹Universit'e d'Evry, France

²Universit'e Paris Diderot, France

³Humboldt University Berlin, Germany

We consider a general class of continuous asset price models where the drift and the volatility functions, as well as the driving Brownian motions, change at a random time. Under minimal assumptions on the random time and on the driving Brownian motions, we study the behavior of the model in all the filtrations which naturally arise in this setting, establishing martingale representation results and characterizing the validity of the NA1 and NFLVR no-arbitrage conditions.

Biography

Qinghua Li received her PhD degree from Columbia University in 2011 and BS degree from the Business School, University of Science and Technology of China, in 2005. From 2011 to 2013, she conducted collaborative research in Institut Europlace de Finance Paris and in the Quantitative Finance Laboratory at Humboldt University Berlin, on topics including stock price dynamics with a change point, algorithmic trading, and market microstructure and risk management.

ms.qinghuali@gmail.com