

*The Hong Kong University of Science and Technology*

## ***Seminar on Business Data Science***

***Department of ISOM***

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### **Cryptocrashes**

by

**Prof. Aleksey KOLOKOLOV**  
**New Economic School, Moscow**

**Date: 16 December 2024 (Monday)**

**Time: 3:00pm – 4:00pm**

**Venue: Classroom 1027, LSK Business Building**

#### ***Abstract***

This paper proposes a new nonparametric test for detecting short-lived locally explosive trends (drift bursts) in pure-jump processes. The new test is designed specifically to detect intraday flash crashes and gradual jumps in cryptocurrency prices recorded at a high frequency. Empirical analysis shows that drift bursts in bitcoin price occur, on average, every second day. Their economic importance is highlighted by showing that hedge funds holding cryptocurrency in their portfolios are exposed to a risk factor associated with the intensity of bitcoin crashes. On average, hedge funds do not profit from intraday bitcoin crashes and do not hedge against the associated risk.

#### ***Bio***

Aleksey Kolokolov is an Assistant Professor in Finance with a wide range of research interests. He focuses on econometrics and financial markets, with specific contributions to advanced statistical methods, high-frequency data analysis, forecasting, modelling jumps and flash-crashes. He holds a PhD in Econometrics and Empirical Economics at the University of Rome "Tor Vergata", Italy.

Currently, he is affiliated with the New Economic School (NES) in Moscow. Previously, Aleksey was affiliated with Alliance Manchester Business School, the University of Manchester.

**All interested are welcome!**  
**Enquiries: Dept of ISOM**