







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

## Recover utility of rational inattentive agent and applications on robo-advising

Professor Hao Xing Boston University

#### **Abstract**

We consider a rational inattentive agent who acquires costly signal to make decisions. By observing agent's actions, we formulate an inverse reinforcement learning problem to recover agent's utility. We propose an efficient numeric algorithm and prove its convergence. The framework is applied to robo-advising problems to recover investors' utilities by observing their investment strategies. This is a joint work with Zeyu Zhu

#### **About the speaker**

Prof. Hao Xing is an associate professor in finance at Boston University. Before joining Boston University, he worked at Department of Statistics, London School of Economics, and obtained his PhD from University of Michigan. Hao's research focuses on stochastic applications control and in financial economics.

### **Date**

3 March 2022 (Thursday)

(HK Time)

#### **Time**

8:30pm – 9:30pm (HK Time)

#### Zoom

https://polyu.zoom.us/j/951 13239993?pwd=Z0Nyc0lzc FJ0ekwwdDhKbGw4eit5dz 09

Meeting ID: 951 1323 9993 Passcode: 0303