







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

## The Social Value of Information Uncertainty Professor Tony He University of Technology Sydney, Australia

#### **Abstract**

We consider probabilistic information acquisition in the canonical Grossman-Stiglitz pure-exchange economy. In contrast to the previous literature, we show that costly information acquisition in financial markets can be welfare-improving. In particular, when risk-sharing incentives are weak and information quality is moderate, the welfare benefit can be very significant for speculators who provide liquidity. We show that marginal welfare can be decomposed into a positive probability-choice effect and a negative informed-trading effect. When the latter effect dominates, which occurs when risk-sharing incentives are strong, only the no-information equilibrium is Pareto-optimal. Otherwise, heterogenous endowment shocks and the Hirshleifer effect allow for a continuum of Pareto optimal equilibria. This suggests that regulatory efforts to alter the amount of informed trading may be unnecessary.

#### About the speaker

Tony He has been a Professor in Finance at University of Technology Sydney (UTS) since 2010. He has been a co-editor of Journal of Economic Dynamics and Control since 2013.

Prof. Tony He received his PhD in Finance in 2001 from UTS and PhD in Applied Mathematics in 1995 from Flinders University, the two fundamental disciplines that underpin his areas of teaching and research.

Tony is an internationally recognized expert in financial market modelling and nonlinear dynamics in finance and economics. His research interests cover a broad area of theoretical asset pricing and financial market modelling with heterogeneous beliefs, adaptive learning, and social interaction, and empirical testing on various financial market anomalies and stylized facts such as volatility clustering, profitability of optimal trading, and return predictability. His international research profile is attested by his more than 40 publications in the field of finance and economics, invited contributions to the prestigious Handbook of Financial Markets and Handbook of Computational Economics, numerous keynote talks in the international conferences, and a number of competitively national and international research grants. As a mathematician in his earlier career, Tony has established an international reputation in the field of the theory and application of nonlinear dynamical systems and published more than 40 papers in this area. He has organized and served as committee member of international workshops and conferences. He has also served as associate editor and reviewer of a number of journals in finance, economics and mathematics.

#### **Date**

20 Oct 2021 (Wed)

(HK Time)

### **Time**

3:00pm – 4:00pm (HK Time)

#### Zoom

https://cityu.zoom.com.cn /j/95854732610?pwd=SF Fpb3htbitFa3RxV3dzT1N hck9YQT09

Meeting ID:

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