

PIMS Workshop: The Economics and Mathematics of Systemic Risk and the Financial Networks

28-30 July, 2014

University of British Columbia, Vancouver



Financial markets are not physical systems. The rules they operate are determined by regulation, and the operators try their best to influence and circumvent these regulations insofar as they thwart their own ends. Asset prices are modelled by stochastic processes, as if the randomness came from an outside source, but the markets themselves generate much of the noise. Risk is the downside of randomness. The program will focus on the way the markets generate and propagate risk, and what kind of regulation can mitigate it.

INVITED LECTURERS:

Tobias Adrian (Federal Reserve Bank of New York), Marco Avellaneda (Courant Institute), Christine Cumming (Federal Reserve Bank of New York), Mark Flood (ProBanker Simulations, LLC.), Olivier Gossner (Paris School of Economics), Matheus Grasselli (McMaster University and Fields Institute), Tom Hurd (McMaster University), Alejandro Jofre (University of Chile), Joe Langsam (University of Maryland), Andy Lo (Massachusetts Institute of Technology), Semyon Malamud (Swiss Finance Institute and EPFL), Alireza Tahbaz-Salehi (Columbia Business School), Bernd Schwaab (European Central Bank), Agnes Sulem (INRIA-Rocquencourt), Stephane Villeneuve (Toulouse School of Economics), Xavier Vives (IESE), Thaleia Zariphopoulou (University of Texas)

PANEL DISCUSSIONS:

Two panel discussions will feature academic, regulators, central bankers, and industry representatives whose mandate for the panels will be to present the different points of view on systemic risk, and help define a research agenda, especially for young applied mathematicians and financial engineers.

ORGANIZERS: Rene Carmona (Princeton University), Ivar Ekeland (Université Paris Dauphine), George Papanicolaou (Stanford University)

WEBSITE: www.pims.math.ca/scientific-event/140728-temsrafnw











