

The summer school comprised six courses of 3 lectures each. The lecturers, economists, finance academics and mathematicians, were of the highest caliber, and leaders in their respective fields of expertise.

A wide range of issues were raised by the lecturers and the choices of topics were radically diverse. The tools brought to bare to tackle the issues raised by the lecturers were as diverse as their own backgrounds. The presentations ranged from the most mathematical models, including sophisticated stochastic game models (Sannikov), high dimensional stochastic dynamical systems and mean field games (Fouque), to the one or two period models leading to explicit solutions highlighting investor behavior at the source of bank runs (Rochet). They also covered the analysis of the complex networks underpinning the system of financial transactions and the impact of regulatory constraints like clearing and capital requirement (Cont, Glasserman). Finally, investor behavior and the over the counter markets were given a sound mathematical foundation in game theoretic frameworks (Duffie).

The diversity in background of the lecturers was mirrored in the attendance which was a patchwork of PhD students and young researchers representing the fields of economics and applied mathematics in approximately the same proportions. They were actively involved in all the lectures and their active participations made the event lively and entertaining. The constant exchanges speakers/audience were an important aspect of this.

The workshop following the school picked up where the school let off: analysis of large systems and stress propagation through complex networks. The presence of regulators and researchers from US and European central banks and from the Office of Financial Research gave a different tone to the interactions between the speakers and the audience. While cutting edge mathematical analysis of systemic risk models were presented, legal issues and regulation took center stage the second day of the workshop. One of the highlights of the workshop was a panel addressing some of the aftermaths of the crisis including regulatory interventions. The unique perspectives offered by the diverse group of panelists from academia, the banking industry, the New York Feds and the European Central Bank got the audience excited and actively involved in a vibrant debate.

While the study of systemic risk is not a field of its own yet, vibrant research is conducted by economists, mathematicians and engineers and the synergy demonstrated during the PIMS program has all the signs of a nascent interdisciplinary field.