New challenges for mathematics in the new economic and financial scenarios

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In this talk I will give a brief overview of current research in economics and finance using tools from mathematics and statistics.

Indeed, the presentation focuses on some of the most important topics that have arisen after the recent financial crisis and have set relevant challenges to mathematics applied to decision making in economics and finance (and not only):

(1) Counterparty credit risk, model calibration and model risk, LIBOR fallback.
(2) Climate change, weather risk and financial impact.
(3) Robotic financial advising: are robots good financial advisors?
(4) Financial education: how mathematics can help in improving the wellness of the society.