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## SOE 1: Risks and Large Deviations in Economic Networks I

Time: Monday 9:30–10:00

Location: H37

SOE 1.1 Mon 9:30 H37

**Global Hyper-Risks, and How to Respond** — •DIRK HELBING  
— ETH Zurich, Clausiusstrasse 50, 8092 Zurich

Financial crises, large-scale conflicts, pandemics, global warming, failures of information and communication systems and their interdependencies can be considered global hyperrisks posing serious threats to our society. They may be triggered by small perturbations or coinci-

dences, or may not need a trigger at all. They are hard to understand, predict, and control. Identical causes may have different effects, while the same effects may have different causes. Global hyper-risks can materialise even if decision-makers are well skilled and do their best. The resulting damage may have any scale. Yet, a "global systems science" could create the understanding needed to manage and avoid them. The talk will discuss, how the above 21st century challenges may be scientifically approached.