Models and Measures of Systemic Risk

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Systemic risk refers to the risk that a financial system is susceptible to failures due to the characteristics of the system itself. The tremendous cost of this type of risk requires the design and implementation of tools for the efficient macroprudential regulation of financial institutions. The first part of the talk presents a comprehensive model of a financial system that integrates network effects, bankruptcy costs, cross-holdings, and fire sales. The second part discusses a multivariate approach to measuring systemic risk.

The talk is based on joint work with Zachary G. Feinstein, Birgit Rudloff, and Kerstin Weske.

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