Motivation
• Banks create a complex network of interactions.
• Shocks spread through the network and cause financial crises.
• Portfolio Compression = Eliminate cycles in the network
  • Idea: Reduce interactions $\rightarrow$ reduce spread
  • Required by law

Research Question
• Does portfolio compression actually make financial networks safer?

Approach
• Large-scale Monte Carlo Simulations
• Optional: Theoretical guarantees

Prerequisites
• Required knowledge:
  • Good programming skills (Python or Java or ...)
  • Basic graph theory (e.g., flows on networks)
• Helpful knowledge:
  • Solid background in mathematics (linear algebra), reading and writing proofs
  • Scientific computing / numerics
• Participants: 2-3

Supervisors: Prof. Sven Seuken, Steffen Schudenzucker.
Contact: schudenzucker@ifi.uzh.ch
Computation and Economics Research Group. www.ifi.uzh.ch/ce