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Yuanying Guan* (guany@iun.edu), 3400 Broadway, Gary, IN 46408. *Systemic Risk and Financial Contagion in Agent-Based Networks.*

The recent financial crisis highlighted the importance of understanding the financial system as a complex interacting system. The relationship between network structure and systemic risk in contagion processes has been studied a lot since then. In this paper, we focus on the contribution of heterogeneity in financial networks. We start from analysis of simple financial networks, and investigate how heterogeneous structures and agents' interactions will impact the extent of contagion. Furthermore, we explore the evolution of these networks in agent-based scenarios.

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