

# Lecture Series of the Research Institute for Supply Chain Management

Friday, June 21, 2024, 12:30 pm  
Room D3.0.225, Welthandelsplatz 1,  
1020 Vienna



**THOMAS Y. CHOI**

## “THE NATURE OF SUPPLY NETWORKS”

Supply networks are made up of companies that seek their own gain. When they are lined up as a supply chain, the system behaves in a non-linear way. When many supply chains are brought together, that leads to supply networks, and supply networks behave as complex adaptive systems (CAS). We can take a cross-section of this CAS by mapping it with companies as nodes. We now have a visualization of a supply network (SN) as a tree-like structure with the focal company on top. This SN contains two types of information—materials flow and contractual relationships. This map of a SN can now be converted into two matrices—one asymmetric (directional) and one symmetric (non-directional). We can then perform computations to identify key suppliers based on their structural positions in the network.

**Thomas Choi** is a Regents Professor and AT&T Professor of Business at Arizona State University. As a researcher, he has studied the upstream side of supply chains, in which a buying company interfaces with many suppliers organized into various forms of network. He has published articles in the Academy of Management Executive, Decision Sciences, Decision Support Systems, Harvard Business Review, Journal of Management, Journal of Operations Management, Journal of Supply Chain Management, Production and Operations Management, and recently on global supply network mapping in Science. He served as the lead editor of the Oxford Handbook of Supply Chain Management. His most recent book is The Nature of Supply Networks (Oxford University Press, 2023).