

**University of Chicago Booth School of Business**

**Operations Management/Management Science Workshop**

**Tuesday, May 24, 2016**

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**Title:** Rationing in Bipartite Networks

**Abstract:**

In the bipartite rationing problem, a set of agents share a single resource available in different types, each agent has a claim over only a subset of the resource-types, and these claims overlap in arbitrary fashion. The goal is to divide fairly the various types of resource between the claimants, when resources are in short supply. When there is single type of resource, this is the standard rationing problem, which has been studied extensively in the economics literature. Some popular solutions to this problem include the proportional, uniform gains, and uniform losses methods. I hope to discuss various generalizations of these methods to the network context, and characterize the solutions using compelling axioms used in the economics literature on rationing. I will focus on two standard requirements---truthfulness and consistency---and discuss ways of extending standard rationing methods to the network setting while satisfying these properties.