

Match Now or Later?

Thursday, September 26, 2024 2:00 PM (1 hour)

The talk will have two parts, both focusing on centralized markets, the tension between short-term and longer-term objectives, and the value of waiting to thicken the market and increase match opportunities.

In the first part I'll talk about hindsight optimality in networks without departures. A matching policy is hindsight optimal if the policy can (nearly) maximize the total collected value, simultaneously at all times. I will present (non-greedy) policies that achieve hindsight optimality in multiway networks and greedy policies that achieve the same goal in two-way networks.

In the second part I'll augment the models with departures/abandonments and address two questions: (1) how does the finite-patience of agents impact the collected match value (this is the cost of impatience), and (2) how does impatience impact the optimality of greedy matching policies.

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Session Classification: Afternoon Session