What You Don't Know Can Help You in School Assignment

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ABSTRACT

When assigning students to schools, the market designer typically balances fairness, efficiency, and strategyproofness. It is well known that it is impossible for a strategyproof mechanism to Pareto dominate the fair assignment. However, it is unknown whether or not a mechanism can Pareto dominate the fair assignment in equilibrium. We demonstrate a surprising result. A mechanism designer can do better by learning less about student preferences when making a school assignment. Specifically, we demonstrate that running the standard assignment algorithm but limiting students to only two applications always has an equilibrium in weakly undominated pure strategies that Pareto dominates the outcome with full preference revelation. We also show that no mechanism that tries to Pareto improve the fair assignment directly has this property: no mechanism that Pareto improves the fair assignment with respect to submitted preferences actually Pareto improves DA in equilibrium.

Refreshments will be served in Daniels Hall room 428
Student Lounge from 11:15 a.m. to 11:45 a.m.
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Biography

Dr. Morrill is an Associate Professor in the department of Economics. His research focuses on market design problems such as auctions, school assignment, and kidney exchange.