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Presentation Title

The Core of School Choice Problems

(with Kang Rong and Yongchao Zhang)

Abstract

We study the core of school choice (i.e., priority-based allocation) problems. We say that a coalition of students is able to enforce a subassignment to them if, based on the priorities at schools, other students together cannot exclude any of them from her assignment. An assignment is said to be in the core if no coalition of students can enforce any subassignment to them that Pareto improves their assignments. We show that assignments in the core are all Pareto efficient, and when the student-proposing deferred acceptance mechanism is a Pareto efficient mechanism, the assignment made by it is always the unique assignment in the core. Moreover, Kesten's efficiency-adjusted deferred acceptance mechanism when all students consent always produces an assignment in the core. This is also true for the top trading cycles mechanism when the quota of every school is one.

Keywords

Core, Deferred acceptance algorithm, Pareto efficiency, school choice, stability, top trading cycles

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