

Singleton core in many-to-one matching problems

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Abstract

We study college admissions problems where unacceptable agents may exist on both sides. We explore two types of conditions for the core to be a singleton. We first consider conditions on the colleges' preferences in problems where the sets of agents and the colleges' capacities are arbitrarily fixed and the students' preferences are chosen freely. We next consider conditions on the colleges' capacities in problems where the sets of agents are arbitrarily fixed and the agents' preferences are freely chosen. In both types of problems, we provide necessary and sufficient conditions for the core to be a singleton.

Keyword: Matching; Stability; Core; Uniqueness; Acyclicity

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