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## Coalitional Stability in the Location Problem with Single-dipped Preferences: An Application of the Minimax Theorem

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## Abstract

This study considers a situation in which agents choose the location of a public facility from a street according to a given mechanism. Agents have single-dipped preferences over a set of feasible locations. We analyze coalitional behavior for any given mechanism for this situation. We identify a necessary and sufficient condition for a mechanism to possess a strong Nash equilibrium by applying the minimax theorem of von Neumann and Morgenstern [37]. We introduce a class of core solutions and show that these solutions are characterized by strong Nash implementability. As a byproduct of these results, we propose a simple mechanism that implements any

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