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Presentation Title
Implementation in Undominated Strategies with Applications to Economic Environments
(with Nozomu Muto and Arunava Sen)

Abstract
This paper considers implementation in undominated strategies by finite mechanisms, where multiple outcomes may be implemented at a single state of the world. In a number of economic environments, we find a new mechanism that improves the classical dominant-strategy incentive compatible mechanism in the sense that the former achieves the designer's objective weakly better than the latter for all states, and strictly better for some state. For example, in auctions with private values, there exists a mechanism that outperforms the second-price auction (with a reserve price) in terms of revenues. In the public good provision problem, there exists a mechanism that outperforms the Vickrey-Clarke-Groves mechanism in terms of the deficit of the designer while maintaining efficiency. In the two-sided matching environment, the social choice correspondence which gives all stable matchings is implementable.

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