

Optimal Variation of Incentive Compatible Allocations

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Abstract

This paper considers the classic mechanism design problem — maximizing an objective subject to a system of incentive compatibility constraints. This is done with a general objective function and preference structure. The paper separately studies the properties of the incentive structure and the implied incentive compatible variations, then evaluating these relative to an arbitrary objective function. This provides a new perspective on the optimization problem and allows a direct treatment of the bunching case. Using this approach the overall problem may be represented recursively and standard routines used to solve for the optimal allocation on any discretized grid of types.

Keywords: Optimization, Incentive compatibility.
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