

The Strategic Use of Seller Information in Private-Value Auctions

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Abstract

In the framework of a first-price private-value auction, we study the seller as a player in a game with the buyers in which he has private information about their realized valuations. We find that depending upon his information, set of signals, and commitment power he may strategically transmit messages to buyers in order to increase his revenue. In an environment where the seller knows the rankings and lacks any commitment power, we find that the seller is unable to exploit his information. However, in an environment where the seller knows the realized valuations and can credibly announce either the true rankings or the true values (or announce nothing at all) but cannot commit as to which of these truthful messages to announce, then it is indeed possible to increase his revenue. If the seller, in addition, can commit to the full signalling strategy, then his expected revenue will be even higher. We believe that this line of research is fruitful for both better understanding behavior in auctions and finding paths to higher seller revenue.