Tournaments with Midterm Reviews

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Abstract

In many tournaments investments are made over time and conducting a review only once at the end, or also at points midway through, is a strategic decision of the tournament designer. If the latter is chosen, then a rule according to which the results of the different reviews are aggregated into a ranking must also be determined. This paper takes a first step in the direction of answering how such rules are optimally designed.

A characterization of the optimal aggregation rule is provided for a two-agent two-stage tournament. In particular, we show that treating the two reviews symmetrically may result in an equilibrium effort level that is inferior to the one in which only a final review is conducted. However, treating the two reviews lexicographically by first looking at the final review, and then using the midterm review only as a tie-breaking rule, strictly dominates the option of conducting a final review only. The optimal mechanism falls somewhere in between these two extreme mechanisms. It is shown that the more effective the first-stage effort is in determining the final review's outcome, the smaller is the weight that should be assigned to the midterm review in determining the agents' ranking.