**Report Summary**

"Truncation-Proof Voting Rules with Ranking and Approval Input"

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This research focuses on two issues of approval voting used for scheduling: the inability to reflect refined preferences and the possibility of strategic manipulation. In response, we propose the Top-restricted Borda rule, which determines a social ranking based on voters’ approval and ranking preferences. Under this rule, each voter assigns scores in ascending order starting from the lowest-ranked alternative among those they approve, and the social ranking is determined by the total points. The Top-restricted Borda rule satisfies truncation-proofness, requiring that voters should not gain an advantage by reducing their approval sets. Moreover, it is the unique approval scoring rule that satisfies four axioms: truncation-proofness, approval monotonicity, non-imposition, and adjacency symmetry. Future work will focus on refining the master’s thesis and attempting an axiomatization within more general rules beyond approval scoring rules.

(本研究では、是認投票の「細かな選好が反映されない」「戦略操作の可能性」の問題に着目し、承認選好と順位情報から社会的順序を決めるTop-restricted Bordaルールを提案する。本ルールはtruncation-proofnessを満たし、approval monotonicity、non-imposition、adjacency symmetryを含む4公理を唯一満たすapproval scoringルールである。)