

## **Mechanism design in discrete settings**

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How to ensure an outcome based on collective decisions is "better for all" when a) everyone acts in their personal interest only, and b) we do not know the exact "motives" of each person? Crudely, this is the central problem in mechanism design, a branch of economics. Many problems are inherently discrete and geometric; however, continuous approximations using analysis tools have traditionally dominated this field. In this talk, I focus on one fundamental problem, survey some recent topological and geometric results, and list some open questions.