

Mechanism Design for Prediction Markets

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Prediction markets have been used to elicit and aggregate private information on uncertain events of interest. The goal of information elicitation and aggregation presents new challenges to the design of market mechanisms. In this talk, I will discuss the design criteria for prediction market mechanisms. With a focus on achieving expressiveness in eliciting information, I will present results on designing automated market maker mechanisms for pricing securities over combinatorial or infinite state spaces. The results show that any market satisfying a set of intuitive conditions can be designed using a convex optimization framework.