

## Research Project

### Information Design in Contests

#### **Third-party funded project**

**Project title** Information Design in Contests

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**Department**

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Contests are one of the most important and pervasive economic institutions in society. Indeed, contests are being employed to allocate various resources or positions, ranging from the award of promotions in companies to the distribution of scholarships among students at universities, or the allocation of research grants to researchers. Within the field of economics the study of contests has a long and successful history. The variety of contests observed in practice is also reflected in the theoretical analysis of these institutions. In a contest there is a number of contestants who compete against each other to win some prize. The details of how the contest is organized, however, play an important role in determining how many parties will want to participate and how much effort they will exert. While contestants typically know what prize they are competing for and how the winner is determined, they may be unaware of the exact number of competitors, their identity or their ability. The designer of a contest can take advantage of this uncertainty and try to better achieve their goal by strategically disclosing information about the environment to the contestants.

The goal of this project is to study the role of information in contests and how the designer of a contest can harness this information to their advantage. More specifically, we are interested in competitors' information about each others' types. In order to study this problem, we plan to make use of the recently developed information design approach, also referred to as Bayesian persuasion. The idea is that in incomplete information environments incentives are determined by payoffs and beliefs. A mechanism designer tries to achieve some outcome by manipulating payoffs. In contrast, an information designer manipulates the agents' beliefs by strategically disclosing information about the environment. This research project focuses on the latter within the context of contests and is structured in three parts. First, we take a general approach to information design in static contests. Second, we allow for information transmission between contestants and study its effect on information design. Third, we move to a dynamic setting and study the information design problem over time. The findings of this project will advance the literature on contest theory and on information design. Moreover, it will foster our understanding of how to best design contests in practice.

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**Add publication**

**Add documents**

**Specify cooperation partners**