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## **AGTIE 2018**

## Algorithmic Game Theory and Internet Economics

Synopsis and Organizers

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Game theory is a mathematical subject initiated by von Noiman and Morgernstem in an effort to model human behavior which has played a key role in economics, operations research and now Internet sciences. Game theory is closely related to many other mathematical subjects, such as fixed points, topology, combinatorics and optimization. It has attracted studied from the Internet generated activities in recent years such as sponsored search auction for search engines, interactive influence on social economic behavior for social networks, preferential matching and pricing for indivisible goods allocations. Combined with Internet economics, and computational issues associated with algorithmic and mechanism designs, it has rising to become an important active field demanding strong mathematical and game theoretical strength for the young mathematicians to contributes their creative ideas and mathematical insights.

The main purpose of this workshop is to bring together people working in game theory to exchange their ideas, communicate the latest research results and develop further collaborations. We expect that after the workshop all participants will have a better understanding of the state-of-the-arts of the area and will have gained impetus to further investigate important problems in the area as well as new problems that will certainly come out of the workshop. Topics included but not limited to the following areas.

- Auctions design
- Nash equilibrium computation
- Social networks
- Consensus in distributed and dynamic systems
- Open problems in Algorithmic game theory

## **Organizers**

Name University

**Andrew Yao** Tsinghua University

Yinyu Ye Stanford University

Xiaotie Deng Shanghai Jiao Tong University