5min MRP

Manuscript

Diffusion auction in social networks

概要：

（1）介绍研究的基本问题

（2）一些在auction领域基本的概念

（3）diffusion auction的优势和特点 (Myerson’s lemma and 2020IJCAI)

（4）未来的发展方向

问题的出发点：一个基本的场景Promote a sale in social network

From a seller he wants to sell an item for some profit.

If he just sells item among his neighbors or cycle of his friends

A natural question raises if he can find a buyer who are willing to pay more money?

Ways to improve the sellers or bidders’ numbers

Some traditional sale promotions

1. promote in shopping centers

2. using some stages like a search engine or some sale stage

3. using ads via social media like WeChat, Facebook.

However, return of these promotions are unpredictable and make get a deficit.

It comes to an idea that how can we design a market mechanism to (1) seller will never lose; (2) all buyers are incentive to diffuse the sale information to all her friends.

Mechanism design is about allocation about the resources and auction is a part of it.

IC:

IR:

Allocation rule

Payment rule