

CS395T
Agent-Based Electronic Commerce
Fall 2006

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Week 8b

Good Afternoon, Colleagues

Are there any questions?

Stopping Rules, Activity Rules

Goal: Fast auction; simultaneous closings; simple

- Close licenses separately, but slow down bidding on each one as final prices are approached.
- Close the core “big” licenses first and simultaneously, then the smaller ones separately.
 - efficiency on big licenses, speed after that.
- Simultaneous close, but require activity
 - Activity on a license: bid placed or previous high bid
 - Low activity lowers *eligibility*
 - Eligibility bounds what you can bid on
 - Activity requirements increase as time goes on

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Bidders can be counted on to seek ways to outfox the mechanism — Milgrom p. 150 (top)

Used laboratory experiments too

Failure modes

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- How do you evaluate whether an auction succeeded?
 - Or even better, whether it **will** succeed?

Combinatorial bidding

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- 700 MHz never happened

Human factors

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- Throwing good money after bad
 - German auction
 - Auction 35 (p.27,28)

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- Dynamic, so more transparent than VCG (good for dependent values)

Class Discussion

- Honain Khan on auctions vs. beauty contests

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- We had to define:
 - How many agents
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 - Their strategies
- Started out as an exploration of strategy space in the simulator

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- Long, iterative process
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- The auctions are a poker game!

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 - Agent is told a perturbed value from actual value
 - Used to compute *satisfaction*

Budget Stretching

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 - How much utility?

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 - How much utility?
- How can you do better?

Fairing and cheater detection

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- How were the magic numbers determined?

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- Is it a dominant strategy in this domain?
- Why are the game matrices representative?
- Is SDR illegal? What about publishing PRSDR?

Allocations vs. Assignment

- You have 30 old textbooks
 - Sell as a group, or one volume at a time?
 - What if they're volumes of a dictionary?
- How would you build/test a theory of allocations?

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- Any other moves you want to discuss?