CS344M
Autonomous Multiagent Systems
Spring 2008

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Good Afternoon, Colleagues

Are there any questions?

Logistics

- Progress reports due at beginning of class
  - Attach your proposals

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- Paul Newman talk today at 2:30

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Self-interested, rational agent

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The protocol is key

Evaluation Criteria

- Social welfare
- Pareto efficiency
- Stability

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- Efficiency (computational, communication)

Voting vs. auctions

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- Voting: maximize social good
  - result affects all
- Auctions: maximize profit
  - result affects buyer and seller

Auctions

- Valuations:

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  - common value

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  - first-price sealed-bid
  - descending (Dutch)
  - second-price sealed-bid (Vickrey)

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Revenue equivalence: private-value, risk-neutral

Class Discussion

Shane Hogan on auctions

Auctions

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- What strategy if auction is:
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  - Descending
  - Vickrey
- What if it's an antique?

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  - Private value case: why?
- In common (and correlated) value case, bids lower in all mechanisms
  - Why?