

Bayesian games

Games and equilibrium concepts under uncertainty

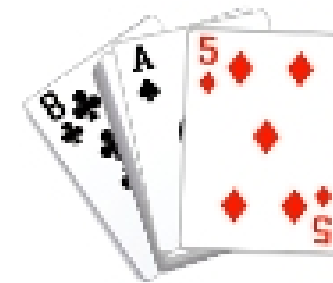
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Examples

- Blackjack

- Action space = draw card/pass
- Add up card values, maximum total < 22 wins
- **What's the next card?**



- JPMorgan buys Bear Stearns

- Action space = share price offered
- Payoff = true value of business – payment
- **What is the extent of the mess?**



- eBay

- **How much did that other guy bid?**



Outline

Goal: to show how to incorporate incomplete information into games, define equilibrium concepts and show how tricky they become.

- Setup sequential games of incomplete information
- Sender-Receiver Games
- Decision making under uncertainty
- Bayesian Nash concepts and desirable properties