

Motivation

- Auctions are any mechanisms for allocating resources among self-interested agents
- Very widely used
 - government sale of resources
 - privatization
 - stock market
 - request for quote
 - FCC spectrum
 - real estate sales
 - eBay

CS Motivation

- **resource allocation** is a fundamental problem in CS
- increasing importance of studying distributed systems with heterogeneous agents
- markets for:
 - computational resources (JINI, etc.)
 - P2P systems
 - network bandwidth
- currency needn't be real money, just something scarce
 - that said, real money trading agents are also an important motivation