Foundations
- Auctions are negotiation mechanisms that are used to organize the exchange of goods and services.
- Almost everything that can be bought and sold may be exchanged in electronic auctions.
- Auctions vary in type and form.
- Negotiations possess a common negotiation process consisting of specific phases.
- Each phase configurable with a phase specific set of parameters.
- The configuration of the negotiation phases determine the auction.
- The specific configuration depends on multiple factors like traded good, participants, information available on the value of the traded good, etc.

The roles and main functionalities of each P in P-Trade
- P as auction runtime environment ARTE
  - communicates with ANS
  - generates auctions running in ARTE
- P as a generic auction client
  - adapts requirements given by the traded good and auction specification
  - Present market and order information
- P as an auction configurator
  - configures new auctions
  - auction configuration based on auction families
  - reconfiguration of running auctions

P-Trade supports the auctioning of any kind of products
- Dynamic property-based description of products enable the specification of any kinds of products.

The system architecture of P-Trade
- A central auction name server (ANS) containing information about running auction
- Each peer (P) registers to the ANS
- ANS delivers information about running auctions to Ps

Each P in P-Trade supports complex market structures
- Complex market structures containing multiple auctions
- Any kind of combination of auctions conceivable

Each P in P-Trade manages complex market structures
- The MetaMarket construct to manage complex market structures
- Auction life-cycle managed by rules
- Rules are based on auction exogenous and endogenous events

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