# Conducting Business Via P2P Introduction

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## **P2P Computing**

- Heavy interest in practice and research
- Visible successes
- An obvious (to a multiagent systems researcher) approach for organizing distributed computations

#### **P2P Computing Limitations**

- Predominantly, a consumer or hobbyist focus
- Popular techniques seem to
  - Be hard-coded to specific applications
  - Violate autonomy: distributed hashing
  - Violate heterogeneity: all sites run the same algorithm

## Potential Scenarios in Open systems

- Data management
- Cross-enterprise business processes
- Service discovery and selection based on QoS
- Achieving trust and resisting threats
- Monitoring and compliance

How to get P2P into mission-critical applications?

#### Themes and Questions

- What are some challenges and pitfalls in
  - Modeling?
  - Methodology?
  - Evaluation of above?
  - Performance?
- What do agents bring to the table?
  - Can agents simplify bootstrapping a system?
  - Is self-organization essential?
  - How do agents relate to P2P middleware?

#### **Panelists**

- Sonia Bergamaschi
- Hector Garcia-Molina
- Sandip Sen
- Steve Willmott