# "Multi-Agent Systems as a Tool to Model Traders' Behavior: A Survey"

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# Multi-Agent Systems

- What are multi-agent systems

- What are thy useful for?

# Minority Games
# Heterogeneity / Homogeneity

- Players in the minority group win.

- El Faro game

- Homogeneous strategies and Homogeneous goals

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- Homogeneous strategies and Heterogeneous preference

# Rational vs Behavioral investors

- Rational Investors

- Behavioral invertors are affected by biases and conservatism

- Agent representation

- The experimentation shows that the rational agent are more likely to bankruptcy.

# Evolutionary Mix-Game Model

- Interaction, Feedback, Frustration, and Adaptation

- Different adaptation strategies

- Results of the experiment

# Fundamentalist, Non-Fundamentalist, and Loss Averse Investors

- Artificial Stock Market

- Herding, Anchoring, Loss aversity

- Evolution and Learning

- Investors' beliefs as a consequence of stock market dynamics

# The Effects of Anti-coordination

- Why not to cooperate

- Evolution of behavior

- Influence from investment strategy

- Influence from network topology

# The Learning Agent

- Learning Agents

- What is being learned?

- Adaptation

- Intelligence level

- Performance

# What lays ahead

- Simulating the influence of the supply change in asset price forecasting.

- Using GPUs

- Deep learning