

Epistemic foundations of economics and game theory

Dov Samet

Basic notions of logic: propositional calculus

The syntax and semantics of knowledge and belief

- Kripke models

- The semantics of set theoretic operators

- Hierarchies of knowledge and universal models

The syntax and semantics of Common knowledge

- The iterative description and the fixed point description

Modeling non-Bayesian solutions for games in strategic and extensive form

- Iterative deletion of strongly and weakly dominated strategies

The syntax and semantics of probabilistic beliefs

- Belief operators and common p-belief

- The universal model

Bayesian games

- Harsanyi type spaces

- endogenizing the game

Correlated equilibrium and non-probabilistic correlated equilibrium

Common priors

- necessary and sufficient condition

- the finite and the countable cases