

Game Theory
Essex Summer School
Take-Home Exam

Instructions

Describe in broad strokes a game-theoretic model that you might use to in your own research. Who would be the actors? What strategies would be available to them? What should we assume that they want and what constraints must we acknowledge that they face? Would the game be repeated? Bearing in mind that we can almost always tell a convincing story about how actors might not know everything, while also recognizing that models become very difficult to solve as we introduce more and more sources of uncertainty, how important is it that one or more of your players face some source of uncertainty? If that is vital to the argument you wish to evaluate, who should be uncertain about what? Is it important to give them a chance to update their beliefs? Finally, what sort of model would this be? Would you seek to generate hypotheses using comparative statics and cut-point strategies? Explore the logical consistency and/or limiting conditions of existing arguments? Or do you feel that your topic of interest is not yet understood well enough for anything beyond a simple, foundational model to be called for?