

PhD scholarships 2024/25

Centre name: DREAM (Durham Research in Economic Analysis and Mechanisms)

Topic 1

Title of proposed research topic:

Bargaining Theory (both cooperative and noncooperative) and Game Theory

Potential supervisors:

Nejat Anbarci

<https://sites.google.com/site/anbarcinejat/publications>

Description of possible research topic with some key references:

Nejat's research interests and expertise are in cooperative (axiomatic) bargaining theory – which is also known as Nash Bargaining theory – and non-cooperative (strategic) bargaining theory. However, he also enjoys working on other game theoretical models as well. His most recent papers, for instance, are on various game-theoretic topics such as

Designing Practical and Fair Sequential Team Contests

Resolving Child Custody Disputes Efficiently

Arbiter Assignment

Public Space Congestion

The Impact of Uncertain Tenure Rules

Cont...

Topic 2

Title of proposed research topic:

Prediction Markets and Information Aggregation

Potential supervisors:

Spyros Galanis

www.sgalanis.com

Description of possible research topic with some key references:

The aim is to understand under which conditions the prediction markets (and financial markets more generally) are an effective tool in aggregating information. The mechanism is that fluctuating prices aggregate the information that is dispersed among all participants and make it public. Information aggregation is one of the basic functions of markets, discussed at least since Hayek (1945), hence it is very important to understand whether it works. Building on the work of Ostrovsky (2012) and Hanson (2003, 2007), the research topic can be theoretical, for example to examine the impact of various behavioural biases, or experimental, to test different designs for prediction markets.

Hanson, Robin. "Combinatorial Information Market Design." *Information Systems Frontiers* 5, 1: (2003) 107–19.

Hanson, Robin. "Logarithmic Market Scoring Rules for Modular Combinatorial Information Aggregation." *Journal of Prediction Markets* 1, 1: (2007) 3–15.

Hayek, Friedrich August. "The Use of Knowledge in Society." *The American Economic Review* 519–30.

Ostrovsky, Michael. "Information Aggregation in Dynamic Markets With Strategic Traders." *Econometrica* 80, 6: (2012) 2595–647.