

# PhD Studentships for Academic Year 2026-27

Durham Research in Economic Analysis and Mechanisms (DREAM)

#### About the Research Centre

Durham Research in Economic Analysis and Mechanisms (DREAM) focuses on three prominent areas:

- Economic Design and Policy
- Economic Behaviour in Dynamic Environments
- Industrial Organization

Other areas that also draw strong attention from the centre are the nature and origin of market power and its distortions on the economy, economic analysis under bounded rationality, the design of contests and prediction markets. DREAM organises the <a href="Durham Economic Theory Conference">Durham Economic Theory Conference</a> and co-organises, together with the Universities of Bristol, Carlos III and Southampton, the <a href="Virtual Seminars in Economic Theory (VSET)">Virtual Seminars in Economic Theory (VSET)</a> and the MSET.

Find out more at: <u>Durham Research in Economic Analysis and Mechanisms</u> - Durham University Business School

### Topic 1

#### **Title of Proposed Research Topic:**

Bargaining Theory (both cooperative and noncooperative) and Game Theory

#### **Potential Supervisors:**

#### Nejat Anbarci

#### **Description of Possible Research Topic:**

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

#### Topic 2

#### **Title of Proposed Research Topic:**

Prediction Markets and Information Aggregation

#### **Potential Supervisors:**

#### **Spyros Galanis**

#### **Description of Possible Research Topic:**

The aim of the project 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.

#### **Key References:**

Hanson, R. (2003). Combinatorial information market design. *Information Systems Frontiers*, *5*(1), 107–119. https://doi.org/10.1023/A:1022058209073

Hanson, R. (2007). Logarithmic market scoring rules for modular combinatorial information aggregation. *Journal of Prediction Markets*, *1*(1), 3–15.

Hayek, F. A. (1945). The use of knowledge in society. *American Economic Review*, 35(4), 519–530.

Ostrovsky, M. (2012). Information aggregation in dynamic markets with strategic traders. *Econometrica*, 80(6), 2595–2647. <a href="https://doi.org/10.3982/ECTA8479">https://doi.org/10.3982/ECTA8479</a>

Galanis, S., Ioannou, C. A., & Kotronis, S. (2024). Information aggregation under ambiguity: Theory and experimental evidence. *Review of Economic Studies*, *91*(6), 3423–3467. https://doi.org/10.1093/restud/rdae009

### Topic 3

### **Title of Proposed Research Topic:**

Causes and consequences of group segregation

### **Potential Supervisors:**

Eren Arbatli and Diego Marino Fages

## **Description of Possible Research Topic:**

We would like to supervise a student interested in applied work with large datasets related to segregation/mobility in the United States and how they are shaped by other factors or how they affect other outcomes of interest.