Department of Mathematics

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE ■

Friday, June 10, 2011, London School of Economics

ESRC Game Theory Workshop
"Correlation and Coordination in Games"

Speakers: Francoise Forges, Vince Crawford, Michalis Drouvelis, Eran Shmaya, Nick Vriend, Joel Sobel

Location: Room EAS.E171 (New Theatre, East Building, LSE)

Refreshments and lunch in room EAS.E304 below the lecture hall.
Maps of the LSE campus can be found here:
http://www2.lse.ac.uk/mapsAndDirections/findingYourWayAroundLSE.aspx

Everybody is welcome and participation is free - contacts for the event:
Professor Bernhard von Stengel stengel@nash.lse.ac.uk, Loraine Evans
l.evans1@lse.ac.uk

Schedule

10:00 Welcome

10:30 Francoise Forges (Paris-Dauphine)
"Implementation of communication equilibria by correlated cheap talk: the two-player case"
(joint with Peter Vida)

Abstract:
We show that essentially every communication equilibrium of any finite Bayesian game with two players can be implemented as a strategic form correlated equilibrium of an extended game, in which before choosing actions as in the Bayesian game, the players engage in a possibly infinitely long (but in equilibrium almost surely finite), direct, cheap talk.

11:25 Vince Crawford (Oxford)
"Efficient mechanisms for level-k bilateral trading"

Abstract:
The paper revisits Myerson and Satterthwaite's (1983 JET) classic analysis of mechanism design for bilateral bargaining with independent private values, relaxing

their assumption of Bayesian equilibrium in favor of a structural nonequilibrium model based on "level-k" thinking.

12:20 lunch (sandwiches, provided)

13:50 Michalis Drouvelis (Birmingham)
"Avoiding coordination-failure using correlation devices: Experiments in 2x2 games"
(joint with John Bone and Indrajit Ray)

Abstract:
We consider a parametric version of Chicken and Battle of the Sexes to test whether or not players are able to coordinate on pure Nash equilibria using correlation devices. We use two different correlation devices, public and private to send recommendations in different sessions with different payoffs for these games and test whether the players follow the recommended strategies to avoid coordination-failure in the respective games. We find that the players overall do achieve coordination by following the recommended strategies; however, "following the recommendation" varies significantly with the treatment (game), period, recommended strategy and Markov (last period) effects.

14:30 Eran Shmaya (Northwestern)
"Outcome equivalence and garbling of signals"
(joint with Ehud Lehrer and Dinah Rosenberg)

Abstract:
In a game with incomplete information each player receives a stochastic signal that depends on the actual state of nature. The signals received are determined by the information structure, which in turn determines the equilibria of the game. Two information structures are equivalent if they induce the same set of equilibrium outcomes. We characterize situations in which two information structures are equivalent in terms of "garblings", which are natural transformations from one structure to another. We study the notion of "being equivalent to" with respect to three equilibrium concepts: Nash equilibrium, agent normal-form correlated equilibrium, and the belief-invariant Bayesian equilibrium.

15:25 coffee break

15:55 Nick Vriend (Queen Mary)
"On the role of non-equilibrium focal points as coordination devices"
(joint with Antoni Bosch-Domenech)

Abstract:
Considering a pure coordination game with a large number of equivalent equilibria, we argue that a focal point that is itself not a Nash equilibrium, and is Pareto dominated by all Nash equilibria, may enhance coordination substantially. Besides attracting the
players' choices to itself, such a non-equilibrium focal point may act as an equilibrium selection device that the players use to coordinate on a small subset of Nash equilibria. We present experimental support for these two roles of non-equilibrium focal points as coordination devices, and suggest a theoretical explanation for this.

16:35 Joel Sobel (San Diego)
"Effective communication in cheap-talk games"
(joint with Navin Kartik)

Abstract:
This paper studies cheap talk games by imposing a monotonicity condition on
Sender strategies and then applies iterative deletion of weakly dominated strategies.
This procedure selects among Crawford and Sobel (1982) equilibria, typically
selecting the outcome with the maximal number of induced actions. Other
refinements, such as NITS, select the same outcome. It also predicts that Senders
will inflate their communication using only the highest messages in equilibrium.

17:30 finish

18:30 reception with starters (provided) at Pu's Brasserie,
Thai Restaurant, 10 Gate Street, WC2A 3HP (northwest corner of Lincoln's Inn
Fields, 1 min from Holborn Tube Station)
http://maps.google.co.uk/maps?hl=en&q=pu%27s+brasserie+gate+street&bav=on.2,
or.r_gc.r_pw.&um=1&ie=UTF-8&sa=N&tab=wl

19:30 Dinner at Pu's Brasserie (self-paid)

Workshop contacts: stengel@nash.lse.ac.uk, l.evans1@lse.ac.uk

This workshop is part of an ESRC sponsored series of one-day workshops
organised by Andres Carvajal (Warwick), Martin Cripps (UCL) and Olivier Gossner
and Bernhard von Stengel (LSE).