2010 Conference on Search Games and Rendezvous

In Honour of the Retirement of Anatole Beck

2 - 3 July 2010
Department of Mathematics & Operational Research Group

London School of Economics and Political Science

- **10:30 - 17:00 Friday 2 July**
  Room H102 (Connaught House)
- **12:00 - 17:00 Saturday 3 July, Room**
  Room NAB LG09 (New Academic Building)

Organisers: **Steve Alpern** (Department of Mathematics) and **Katerina Papadaki** (Operational Research)

This event is sponsored by the **Suntory and Toyota International Centres for Economic and Related Disciplines (STICERD),** the **LSE Department of Mathematics,** and the **LSE Operational Research Group.**

Confirmed Participants

- Steve Alpern (LSE)
- Katerina Papadaki (LSE)
- Leszek A Gasieniec (Liverpool)
- Jurek Czyzowicz (Université du Québec, Canada)
- Adrian Kosowski (Gdansk University of Technology, Poland)
- Robbert Fokkink (TU Delft, Netherlands)
- Alec Morton (LSE)
- John Howard (LSE)
- Shmuel Gal (University of Haifa, Israel)
- Anatole Beck (University of Wisconsin, USA)
- Tom Lidbetter (LSE)
- Russell Martin (Liverpool)
- Vic Baston (Southampton)

Schedule

Session 1 - Rendezvous Search Problems (Chair - Steve Alpern, LSE)

Friday 2nd June

H102 Connaught House - start time 10.30

Time	
10.30 - 10.40	**Welcome** - Steve Alpern (Chair)
10.40 - 11.10	**John Howard (LSE) -** Rendezvous on an Interval
11.10 - 11.40	**Adrian Kosowski -** Rendezvous of mobile agents in graphs
12.00 - 13.00	**Leszek A Gasieniec** - Two Dimensional Rendezvous
13.00 - 14.30	*Lunch - Brunch Bowl, 4th Floor, Main Building*

Session 2 - Search Games (Chair - Katerina Papadaki, LSE)

Friday 2nd June

H102 Connaught House - start time 14.30

Time	
14.30 - 15.10	**Steve Alpern** - Search games on time-asymmetric trees
15.20 - 15.50	**Anatole Beck** - Two Dimensional Search
16.00 - 16.30	**Shmuel Gal** - Coordinated linear search

Session 3 - Search Games (Chair - John Howard, LSE)

Saturday 3rd June

NAB LG09 New Academic Building - start time 14.00

Time	
14.00 - 14.30	**Tom Lidbetter** - The Squirrel-Pilferer nut hiding game
14.40 - 15.10	**Robbert Fokkink** - Ruckle's Conjecture on Accumulation Games

15.20 - 16:00	**Katerina Papadaki** - Patrolling games on networks

Write Up

The LSE 2010 Conference on Search Games and Rendezvous was held at the LSE this July, with participants from many countries. This year the conference was held in honour of the retirement of Anatole Beck, a leading figure in the development of the field. The conference received support from STICERD, the Mathematics Department and the Operational Research Group of the Department of Management. The conference was organized by Steve Alpern and Katerina Papadaki.

This year for the first time a contingent from the area of theoretical computer science attended the conference and showed the original group (from applied mathematics and operations research) the way rendezvous problems are treated in their field. Their group avoids the Bayesian assumptions about the original positions that the operations research people usually make. There was a flow of ideas between the two groups and plans were made for a larger conference to be held in Leiden in 2012.

The conference was held over two days, Friday and Saturday 2-3 July. The Friday morning session had talks on rendezvous search in one or two dimensions by John Howard (LSE), Adrian Kosowski (Gdansk University of Technology) and Leszek Gasieniec (Liverpool). A fourth talk on (asynchronous) rendezvous was give on Saturday by Jurek Czyzowicz (Université du Québec, Canada).

The Friday afternoon session had talks on search problems with an antagonistic or motiveless Hider, given by Steve Alpern (LSE), Anatole Beck (Wisconsin, USA) and Shmuel Gal (Haifa, Israel). These talks focused on new approaches to classical problems.

The Saturday session featured talks by Tom Lidbetter (LSE) on a caching game between a scatter-hoarder such as a squirrel and a pilferer, by Robbert Fokkink (TU Delft, Netherlands) on accumulation games and Katerina Papadaki (LSE) on patrolling games on networks.