

ADA LOVELACE LECTURES

Oxford Computer Science Public Lectures

DOUBLE BILL The Oxford Strachey Lecture: Computer Agents that Interact Proficiently with People by Professor Sarit Kraus LEARNING AND EFFICIENCY OF OUTCOMES IN GAMES

(Bar-llan University & University of Maryland)
is on in the same venue at 4pm. With refreshments available in-between.

Book for this second lecture separately at: goo.gl/bkSsPs Eva Tardos,
Department of Computer Science, Cornell University

17:30 - 18:30

06 • 06 • 2017

Lecture Theatre 2
Oxford Mathematical
Institute,
University of Oxford,
Andrew Wiles Building,
Woodstock Rd,
Oxford OX2 6GG

Selfish behaviour can often lead to suboptimal outcome for all participants, a phenomenon illustrated by many classical examples in game theory. Over the last decade we developed good understanding on how to quantify the impact of strategic user behaviour on the overall performance in many games (including traffic routing as well as online auctions). In this talk we will focus on games where players use a form of learning that helps them adapt to the environment, and consider two closely related questions: What are broad classes of learning behaviours that guarantee that game outcomes converge to the quality guaranteed by the price of anarchy, and how fast is this convergence. Or asking these questions more broadly: what learning guarantees high social welfare in games, when the game or the population of players is dynamically changing.

Admission free, booking advised:

https://goo.gl/gf5rYN jayne.bullock@cs.ox.ac.uk

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