



SIRE PhD training course on **Search and Matching**  
with Prof. Philipp Kircher (University of Edinburgh)  
Friday, 6 December 2013  
Old College, LT175, University of Edinburgh  
9.30-17.00



SIRE is pleased to announce a PhD training course on 'Search and Matching' with Prof. Philipp Kircher (University of Edinburgh).

The goal of the course is to expose students to the broad methodology and questions within this field, and to the relevant literature. The course is not long enough to go into the full details, but is designed to get students interested to pursue further study on their own, and to point out how to get started on self-study.

It is presumed that the participants are familiar with basic modelling and math, even though the main logic should become clear also on a fairly intuitive level.

This full day activity will be held on Friday the 6<sup>th</sup> of December, LT175, Old College, University of Edinburgh. Closing date for registration is 2<sup>nd</sup> of December.

<http://www.ed.ac.uk/maps/?building=old-college>

Participation is free but online registration is required. An e-mail with details and confirmation will be sent in November.

Book a space: <http://tinyurl.com/om3fhe5>

Students and academics based at Economics departments in Scotland will be able to claim travel expenses (the equivalent of a 2nd class rail fare). Participants based at the University of Aberdeen will be able to book one night accommodation for Thursday 5th of December (to be booked via this online booking form only).

## Programme

9.15	Coffee and welcome
9.30 part 1	The first part covers micro aspects of matching theory in frictionless markets (no search frictions). It will touch on stable matching theory, which has recently been applied to the allocation of students to schools and for medical interns to hospitals. In these models there is usually no exchange of money but preferences are kept rather general. Then we introduce the exchange of money but move to more restricted models, which are often used in applied work to understand, e.g., the salary payments of CEO's. The literature for this part will include parts of (a)-(g) below, plus some additional material mentioned at the time.
10.30 - 10.45	Break
10.45 - 12.15	Part 1 <i>continued</i>
12.15 - 13.00	Lunch
13.00 - 15.00	Part 2 In part 2 we move to frictional markets, in which unemployment across different worker types can be discussed. This part will focus mainly on new techniques in this area, where firms can advertise the attractiveness of their jobs to attract workers. This will introduce new considerations how to model unemployment even if workers and firms are all identical. Then it will return to the problem of matching when both sides are heterogeneous. The literature for this part will include parts of (h)-(k) below, plus some additional material mentioned at the time.
15.00 - 15.15	Break
15.15 - 17.00	Part 2 <i>continued</i>



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*Recommended readings*

**Literature**

- (a) Roth, Alvin and Marilda Sotomayor, *Two-sided matching - A study game-theoretic modelling and analysis*, Cambridge University Press, 1990.
- (b) Abdulkadiroglu, Atila and Tayfun Sonmez: "School Choice: A Mechanisms Design Approach," *American Economic Review*, 2003, 93/3
- (c) Erdil, Aytek and Haluk Ergin: "What's the matter with Tie-Breaking? Improving Efficiency in School Choice." *American Economic Review* 2008, 98/3, pp. 669-689.
- (d) Chakraborty, Archishman, Alessandro Citannay and Michael Ostrovskyz (2007): "Two-sided matching with interdependent values," mimeo.
- (e) Sacerdote, Bruce. "Peer effects with random assignment: Results for Dartmouth roommates." *The Quarterly Journal of Economics* 116.2 (2001): 681-704.
- (f) Becker, Gary S. "A theory of marriage: Part I." *The Journal of Political Economy* (1973): 813-846.
- (g) Tervio, Marko. "The difference that CEOs make: An assignment model approach." *The American Economic Review* 98.3 (2008): 642-668.
- (h) Burdett, Kenneth, Shouyong Shi and Randall Wright (2001): "Pricing and Matching with Frictions," *Journal of Political Economy*, 109, 1060-1085.
- (i) Eeckhout, Jan, and Philipp Kircher. "Sorting and decentralized price competition." *Econometrica* 78.2 (2010): 539-574.
- (j) Shimer, Robert, and Lones Smith. "Assortative matching and search." *Econometrica* 68.2 (2000): 343-369.
- (k) Eeckhout, Jan, and Philipp Kircher. "Identifying sorting—in theory." *The Review of Economic Studies* 78.3 (2011): 872-906.

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