Models of Partnership Formation with Friction

Seminar with Dr David Ramsey / University of Limerick, Ireland

Abstract

Such problems are of interest in theoretical economics and biology as job search problems and mate search problems, respectively. In general, there are two classes of player (e.g. male and female or job seeker and employer). Each player wishes to form a partnership with a player from the other class. Individuals observe a sequence of potential partners, until they find one who is mutually acceptable. The reward obtained from search is the value of the partner found minus the search costs, which are assumed to be linear in time.

Classical models of this form assume that only one class of player (e.g. females) is choosy and the distribution of the value of males is known. In this case, the optimal strategy is of the following form: accept the first prospective partner whose value exceeds the expected reward from future search. Many models have been developed to generalize these rather simplistic assumptions, e.g. to take into account that both classes might be choosy, individuals might have to learn about the distribution of the values of prospective mates and different types of preferences (common preferences, where all females agree on the attractiveness of males, or homotypic preferences, where searchers prefer partners who are similar to themselves in some sense).

This talk will give a brief overview of the history of such models. A model of mutual mate choice is presented in which preferences are based on the age of prospective partners (i.e. the value of a searcher changes during the search process according to his/her age).