## SEMINARIO DEL DEPARTAMENTO DE PROBABILIDAD Y ESTADÍSTICA

SESIÓN CONJUNTA CON EL SEMINARIO DE PROBABILIDAD Y PROCESOS ESTOCÁSTICOS DE LA FACULTAD DE CIENCIAS, UNAM

## Dr. Adrían González Casanova Weierstraß-Institut für Angewandte Analysis und Stochastik

## MODELLING SELECTION VIA MULTIPLE ANCESTORS

In this talk we will introduce a generalisation of the Wright Fisher model, for a population with finite size and non-overlapping generations, allowing for several types of selection as well as simultaneous multiple mergers. The construction provides an almost sure dual relation between its frequency process and its ancestral process. The latter can be interpreted as a discrete analogue to the celebrated ancestral selection graph. We will also study a two type frequency process with general selection and general coalescent mechanism, and investigates in which cases the selective type goes to fixation with probability one. (This is talk is based in a joint project with Dario Spano).



22 de febrero de 2017 Aula 203, Edificio Anexo del IIMAS 13:30 horas

Circuito Escolar, Ciudad Universitaria