ACMS Applied Math Seminar

ALAN LINDSAY Thurs, Apr 30 127 Hayes-Healy 3:30 PM

First passage time problems in heterogeneous and dynamic environments

Random dispersal is a fundamental transport mechanism in many physical, biological and social systems. An important statistic associated with such systems is the first passage time (FTP) - the distribution of times for which reacting components come into contact. In this talk I will discuss mathematical aspects and results pertaining to this problem and in particular treatment of factors such as heterogeneity and dynamics of the environment. Typically, the focus is on factors which combine to result in the lowest possible first passage time. This gives rise to many interesting optimizations problems.

The Department of Applied and Computational Mathematics and Statistics Please visit acms.nd.edu to view the full list of speakers.