

Undergraduate Math Club

Winter 2007

2nd floor Nesbitt Common Room

Thursday, March 22, 4:10-5:00pm

(free pizza and pop, as always)

Eigenvalues

Will Australians Live or Die?

Professor Alexei Kolesnikov

Abstract

Understanding and predicting population dynamics is an important problem in demography. One of the approaches to this problem uses linear algebra to model how a population changes with time. From a mathematical point of view, this approach allows us to illustrate the meaning of eigenvalues (in particular, complex eigenvalues) and eigenvectors (including generalized eigenvectors) in terms of life and death matters.