RUTGERS UNIVERSITY
DEPARTMENT OF STATISTICS AND BIOSTATISTICS
HILL CENTER #501, BUSCH CAMPUS, PISCATAWAY

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Seminar

Speaker: Professor John Robinson, School of Mathematics and Statistics, University of Sydney

Title: Asymptotic Approximations in Sampling and Resampling

Date: Wednesday, September 15, 2010

Time: 3:20 p.m.

Place: 552 Hill Center

ABSTRACT

The ideas of sampling with and without replacement connect each of the areas of finite population samples, permutation tests, rank tests and bootstrap methods. Normal and Edgeworth approximations, Cram\' er large deviation results and related saddlepoint approximations have been obtained in one and two sample cases, and some results on Studentized statistics, k-sample and multivariate cases have been obtained quite recently. In the case of the bootstrap, asymptotic methods have been used to give theoretical results on their accuracy. I will survey of some of the main asymptotic methods and indicate in more detail some relatively recent results, on approximations for Studentized and multivariate statistics.