

SPECIAL COLLOQUIUM

Dr Stephen J. Willson

will present

Some mathematical issues in reconstructing evolutionary history from DNA

2:30 pm

Wednesday, November 10th

Violette Hall 1236

Abstract: Recent technological breakthroughs have made large portions of the DNA from many different species available to researchers. If we assume that homologous DNA for a collection of species is known, then a major problem is to reconstruct the historical relationship among those species using that DNA. The mathematical answer will be a “phylogenetic tree”—a diagram that indicates how current species are related to ancestral species. This talk will indicate some different criteria that are used to build phylogenetic trees from DNA. Several criteria will be described, and various strengths and weaknesses of the methods will be indicated.

Dr. Willson is a professor at Iowa State University, (located in Ames, Iowa). Afterwards he will talk about graduate studies in mathematics at ISU.

Cookies and Refreshments!!!