UNIVERSITY OF RHODE ISLAND
Department of Mathematics

Applied Mathematics and
Scientific Computing Seminar

Location: Lippitt Hall 204
Time: Friday, September 18, 2015, 1:00pm

Math in the time of data

by Brian Lewis

Abstract: We generate a remarkable quantity of data these days, often measured in hard to imagine quantities like petabytes. Fortunately

$$\text{data} >> \text{information}(*),$$

and mathematics and statistics are essential tools used to extract meaning from data. Thus, skills of mathematicians are strongly in demand. The speaker will discuss practical aspects of "data science" including an overview of popular software tools with real-world examples from genomics and network analysis.

(*) A phenomenon that Michael Wu calls the "big data fallacy."

Biography: Bryan Lewis is a numerical analyst interested in inverse problems, subspace methods, and large-scale scientific computing. He is deeply involved the R and SciDB open-source/free software projects, and currently works at Paradigm4 supporting SciDB. Bryan has broad experience working on applied problems together with researchers in diverse application areas including genomics, finance and biostatistics.