

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

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Seminar

Speaker: Professor Aude Grelaud, Rutgers University

Title: Likelihood-free methods in genomics

Date: Wednesday, November 3, 2010

Time: 3:20 p.m.

Place: 552 Hill Center

ABSTRACT

Some recent methods based on Bayesian simulations have provided ways of evaluating approximately posterior distributions without computing likelihood functions. These likelihood free algorithms, also known as ABC algorithms (Approximate Bayesian Computation), are of particular interest when considering complex models. They can be used as soon as data can be simulated from the model.

In this talk, I will show that it is also possible to use this methodology for model selection and that sequential version of this algorithm can reduce the computational cost. These are illustrated by some applications to genomics problems.