

INCORPORATION OF UNCERTAINTY IN INVERSE PROBLEMS

H. T. Banks
Center for Research in Scientific Computation
N.C. State University
Raleigh, N. C. 27695-8205 USA
e-mail: htbanks@eos.ncsu.edu

ABSTRACT

In this lecture we will discuss a number of ways in which uncertainty arises in classes of inverse problems. Examples from biology and materials will be used to motivate a framework in which parameters to be estimated are treated as random variables. Detailed results from a project on modeling uncertainty in production delays in HIV pathways will be given to illustrate the ideas.