STATISTICS COLLOQUIUM

MONDAY, OCTOBER 04, 2010
TALK: 4:00 PM — SCIENCE CENTER RM. 309
RECEPTION: 5:15 PM — SCIENCE CENTER, 7TH FLOOR

"Subjective Likelihood for Assessing Trends in the Ocean's Mixed-Layer Depth"

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ABSTRACT

This paper describes a Bayesian statistical analysis of long term changes in the depth of the ocean's mixed layer. The data are thermal profiles recorded by ships. For this data there is no good sampling model for the data given the parameter and therefore no obvious likelihood function. Our approach is to elicit posterior distributions for training data directly from the expert. We then infer the likelihood function and use it on large data sets.