



Dipartimento
di Statistica
"G. Parenti"

Il giorno **11 luglio 2005**, alle ore 14.30, presso l'aula 32 del Dipartimento, il prof. **Alan Agresti** (Department of Statistics, University of Florida), terrà un seminario dal titolo:

Bayesian Inference for Categorical Data Analysis: A Survey

Tutti gli interessati sono invitati a partecipare.

Segue un abstract del seminario.

Bayesian Inference for Categorical Data Analysis: A Survey

This seminar surveys Bayesian methods for categorical data analysis, with primary emphasis on contingency table analysis. Early innovations were proposed by I.J. Good for smoothing proportions in contingency tables and by Dennis Lindley for inference about odds ratios. These approaches primarily used conjugate beta and Dirichlet priors. Pat Altham presented Bayesian analogs of small-sample frequentist tests for 2x2 tables using such priors. An alternative approach using normal priors for logits received considerable attention in the 1970s by Tom Leonard and others. Adopted usually in a hierarchical form, the logit-normal approach allows greater flexibility and scope for generalization. The 1970s also saw considerable interest in Stein-influenced Bayesian shrinkage methods and in loglinear modeling. The advent of modern computational methods since the mid-1980s has led to a growing literature on fully Bayesian analyses with models for categorical data, with main emphasis on generalized linear models such as logistic regression for binary and multi-category response variables and hierarchical generalizations.