In This Issue

CONDITIONAL INFERENCE AND THE ELIMINATION OF NUISANCE PARAMETERS

Two papers on different, yet possibly related topics are published together in this issue. The first, by Nancy Reid, is concerned with conditional inference. Reid briefly describes the various purposes of conditioning in inference; these together form a paradigm often called neo-Fisherian. Over the past fifteen years or so, various asymptotic expressions have been developed as approximations to relevant densities and distribution functions, and these are the main focus of Reid's article. She also touches on some foundational aspects of conditional inference.

The second paper, by Kung-Yee Liang and Scott Zeger, considers inference about a vector of parameters in the presence of other parameters, so-called nuisance parameters. They first consider situations in which there is a fully specified parametric model for the data, then emphasize those in which there is only a partial or "semiparametric" specification. For the class of problems they consider, Liang and Zeger establish a common framework and review some of the methodology developed for estimating the parameters of interest via estimating equations. Along the way, they also cite some of the early applications of this approach.

These two papers have little overlap in subject matter, but there is an important point of contact: Reid, along with Liang and Zeger, discusses inference in the presence of nuisance parameters. The papers were sent together to a set of discussants, who were asked to comment on either or both. V. P. Godambe, Bruce Lindsay and Bing Li, and Peter McCullagh make some remarks on the relationship of the two papers as well as commenting on them separately. George Casella, Thomas DiCiccio and Martin Wells, A. P. Dawid and C. Goutis, and Thomas Severini confine themselves to Reid's paper; Louise Ryan discusses the paper by Liang and Zeger.

TREE-INDEXED PROCESSES

Trees together with random variables assigned to each edge or vertex arise in many ways. The resulting processes, however, may be viewed as random fields indexed by paths through the trees. Over the past few years a body of work has emerged demonstrating the power and elegance of this reformulation. In his article here, Robin Pemantle explains the essential ideas used in constructing tree-indexed processes, motivates them by indicating the wide scope of their application and summarizes the main known results about them. He then considers their application via branching models, discusses the geometry of Cantor-like sets and lists four outstanding problems in the form of conjectures.

JOE GANI

Born in 1924, Joe Gani has been one of the major contributors to the field of applied probability, both as a researcher and as an effective organizer in the profession. In an interview conducted by Chris Heyde, Gani talks about his education and his role in several scientific and educational institutions. He touches on some of his work on the theory of dams, the study of literary texts, and stochastic modeling of bacteriophages and epidemics; he describes the establishment of the Applied Probability Trust, which enabled him to start the *Journal of Applied Probability* and *Advances in Applied Probability*; and he reflects on his work as Director of the Manchester–Sheffield School of Probability and Statistics, as Chief of the CSIRO Division of Mathematics and Statistics and as Chair of the Department of Statistics at the University of Kentucky and also the Department of Statistics and Applied Probability at the University of California, Santa Barbara.