SHORT BOOK REVIEWS

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STATISTICAL REGRESSION WITH MEASUREMENT ERROR. C.-L. Cheng and J.W. Van Ness. London: Arnold, 1999, pp. xi + 262, £35.00.

Contents:

1. Introduction to linear measurement models
2. Properties of estimates and predictors
3. Comparing model assumptions and modifying least squares
4. Alternative approaches to the measurement error model
5. Linear measurement error model with vector explanatory variables
6. Polynomial measurement error models
7. Robust estimation in measurement error models
8. Additional topics

APPENDIX A : Identification in Measurement Error Models (Overview, Structural Model, Functional Model, Identifyability and Consistent Estimation)

Readership: Measurement error model enthusiasts

This volume represents a satellite expansion of Chapter 29 from *The Advanced Theory of Statistics*, Volume 2 (1979), pp. 399-443, authored by M.G. Kendall and A. Stuart. It is clearly written and attractively laid out, and would be excellent for a graduate seminar or as a reference book. Its strengths lie in a careful exposition of technicalities, an important achievement in this area where the literature is intricate, complex and multi-faceted. Its weaknesses lie in the presented practical application of these techniques. There are not many sets of data, and their use is somewhat perfunctory. Most of the exercises are theoretical or Monte Carlo ones. Personally, I think the geometric mean functional relationship is a useful and sensible practical technique; thus I was dismayed with the advice given on page 44!

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