TESTING STATISTICAL HYPOTHESES. THIRD EDITION. A CLASSIC LEHMANN AND ROMANO BOOK

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It is at the same time easy and difficult to say something about a book that has become a classic, and this "Testing Statistical Hypotheses" is evidently the third edition of a book in this category. Almost all statisticians know and have at some time used the first edition published in 1959 or the second edition published in 1986.

In 1997 Lehman wrote in Statistical Science, vol. 12, a small but interesting article titled "The story of a book", where he recounts the lengthy genesis, philosophy, reception and publishing history of the first two editions. There he explained that with the money received for the book, he could not have built a house, not even a modest one, but it did enable him to buy a fancier car.

In the third edition, Lehman and Romano appear as authors, and the book is dedicated to the memory of Le Cam and Tukey. You see that all these names are top level and well-known among statisticians.

Jointly with the second edition of the companion volume "Theory of Point Estimation", written by Lehman and Casella, these constitute a set of obligatory references in all courses of advanced Statistics.

The present edition is divided into two parts. Part I treats small sample theory in chapters 1-10, while part II treats large sample theory in chapters 11-15.

As the authors note in the preface, the two principal additions in this edition have been the treatment of multiple comparisons and the asymptotic optimality, following the ideas of Le Cam and Tukey.

All the chapters have a remarkable collection of problems and finish with very interesting historical notes. The style makes the reading of the book very agreeable.

In summary, this is a recommendable book that is already a classic and has become an essential reference in this subject.

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