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Titolo	The Significance Test Controversy Revisited : The Fiducial Bayesian Alternative / / by Bruno Lecoutre, Jacques Poitevineau
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction -- Preamble - Frequentist and Bayesian Inference -- The Fisher, Neyman-Pearson and Jeffreys Views of Statistical Tests -- GHOST: An Officially Recommended Practice -- The Significance Test Controversy Revisited -- Reporting Effect Sizes: The New Star System -- Reporting Confidence Intervals: A Paradoxical Situation -- Basic Fiducial Bayesian Procedures for Inference About Means -- Generalizations and Methodological Considerations for ANOVA -- Conclusion -- Index.
Sommario/riassunto	The purpose of this book is not only to revisit the “significance test controversy,”but also to provide a conceptually sounder alternative. As such, it presents a Bayesian framework for a new approach to analyzing and interpreting experimental data. It also prepares students and researchers for reporting on experimental results. Normative aspects: The main views of statistical tests are revisited and the philosophies of Fisher, Neyman-Pearson and Jeffrey are discussed in detail. Descriptive aspects: The misuses of Null Hypothesis Significance Tests are reconsidered in light of Jeffreys’ Bayesian conceptions concerning the role of statistical inference in experimental investigations. Prescriptive

aspects: The current effect size and confidence interval reporting practices are presented and seriously questioned. Methodological aspects are carefully discussed and fiducial Bayesian methods are proposed as a more suitable alternative for reporting on experimental results. In closing, basic routine procedures regarding the means and their generalization to the most common ANOVA applications are presented and illustrated. All the calculations discussed can be easily carried out using the freeware LePAC package.