Asymptotic theory and the foundations of statistics[1]

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Abstract

Statistics in the 20th century has been enlivened by a passionate, occasionally bitter, and still vibrant debate on the foundations of statistics and in particular on Bayesian vs. frequentist approaches to inference. In 1975 D.V. Lindley predicted a Bayesian 21st century for statistics. This prediction has often been discussed since, but there is still no consensus on the probability of its correctness. Recent developments in the asymptotic theory of statistics are, surprisingly, shedding new light on this debate, and may have the potential to provide a common middle ground.

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