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Nota di contenuto	1 Random numbers -- 2 Discrete distributions -- 3 One-dimensional absolutely continuous distributions -- 4 Multi-dimensional absolutely continuous distributions -- 5 Convergence of distributions -- 6 Discrete time Markov chains -- 7 Continuous time Markov chains -- 8 Statistics -- 9 Combinatorics -- 10 Discrete distributions -- 11 One-dimensional absolutely continuous distributions -- 12 Absolutely continuous and multivariate distributions -- 13 Markov chains -- 14 Statistics -- 15 Elements of combinatorics -- 16 Relations between

discrete and absolutely continuous distributions -- 17 Some discrete distributions -- 18 Some one-dimensional absolutely continuous distributions -- 19 The normal distribution -- 20 Stirling's formula -- 21 Elements of analysis -- 22 Bidimensional integrals.

Sommario/riassunto

This book provides an introduction to elementary probability and to Bayesian statistics using de Finetti's subjectivist approach. One of the features of this approach is that it does not require the introduction of sample space – a non-intrinsic concept that makes the treatment of elementary probability unnecessarily complicate – but introduces as fundamental the concept of random numbers directly related to their interpretation in applications. Events become a particular case of random numbers and probability a particular case of expectation when it is applied to events. The subjective evaluation of expectation and of conditional expectation is based on an economic choice of an acceptable bet or penalty. The properties of expectation and conditional expectation are derived by applying a coherence criterion that the evaluation has to follow. The book is suitable for all introductory courses in probability and statistics for students in Mathematics, Informatics, Engineering, and Physics.