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Titolo	An Invitation to Probability and Data Analysis for Physicists / / by Roberto Piazza
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ISBN	9783031838569 3031838564
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (689 pages)
Collana	UNITEXT for Physics, , 2198-7890
Disciplina	530.8 530.7
Soggetti	Measurement Measuring instruments Statistics Stochastic processes Mathematical physics Measurement Science and Instrumentation Statistics in Engineering, Physics, Computer Science, Chemistry and Earth Sciences Stochastic Processes Theoretical, Mathematical and Computational Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Describing the data -- Probability: basic concepts -- Probability distributions -- Probability: Accessories for Use -- Probability and Information -- Speculating about probability -- Probability and statistics in physics -- Randomness in measurements -- Data Analysis and decision theory.
Sommario/riassunto	This book is an introduction to probability, statistics, data analysis, and hypothesis testing in physics. It is designed to be taught at different levels, from basic to advanced, and to be enjoyed by anyone doing research in the physical sciences or related subjects. It aims to be a companion in a journey leading the reader to appreciate and enjoy the major role of these subjects in all aspects of the physical sciences. With

specific examples, the book encourages readers to meditate on the distinctive meaning of probability in classical and quantum physics. The author draws on his teaching experience in statistical physics and data analysis, as well as his research work in fields like complex systems and soft matter, to provide a comprehensive introduction to statistical methods.
