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Titolo	Measure, Integral and Probability [[electronic resource] /] / by Marek Capinski, (Peter) Ekkehard Kopp
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Soggetti	Probabilities
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	Mathematics, general
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	 Motivation and preliminaries 2. Measure 3. Measurable functions 4. Integral 5. Spaces of integrable functions 6. Product measures 7. Limit theorems 8. Solutions to exercises 9. Appendix References.
Sommario/riassunto	The central concepts in this book are Lebesgue measure and the Lebesgue integral. Their role as standard fare in UK undergraduate mathematics courses is not wholly secure; yet they provide the principal model for the development of the abstract measure spaces which underpin modern probability theory, while the Lebesgue function spaces remain the main sour ce of examples on which to test the methods of functional analysis and its many applications, such as Fourier analysis and the theory of partial differential equations. It follows that not only budding analysts have need of a clear understanding of the construction and properties of measures and integrals, but also that those who wish to contribute seriously to the applications of analytical methods in a wide variety of areas of mathematics, physics, electronics, engineering and, most recently, finance, need to study the underlying theory with some care. We have found remarkably few texts in the current literature which aim explicitly

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to provide for these needs, at a level accessible to current undergraduates. There are many good books on modern prob ability theory, and increasingly they recognize the need for a strong grounding in the tools we develop in this book, but all too often the treatment is either too advanced for an undergraduate audience or else somewhat perfunctory.