Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics)

By Salomon Bochner

Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner

Nineteenth-century studies of harmonic analysis were closely linked with the work of Joseph Fourier on the theory of heat and with that of P. S. Laplace on probability. During the 1920s, the Fourier transform developed into one of the most effective tools of modern probabilistic research; conversely, the demands of the probability theory stimulated further research into harmonic analysis. Mathematician Salomon Bochner wrote a pair of landmark books on the subject in the 1930s and 40s. In this volume, originally published in 1955, he adopts a more probabilistic view and emphasizes stochastic processes and the interchange of stimuli between probability and analysis. Non-probabilistic topics include Fourier series and integrals in many variables; the Bochner integral; the transforms of Plancherel, Laplace, Poisson, and Mellin; applications to boundary value problems, to Dirichlet series, and to Bessel functions; and the theory of completely monotone functions.

The primary significance of this text lies in the last two chapters, which offer a systematic presentation of an original concept developed by the author and partly by LeCam: Bochner's characteristic functional, a Fourier transform on a Euclidean-like space of infinitely many dimensions. The characteristic functional plays a role in stochastic processes similar to its relationship with numerical random variables, and thus constitutes an important part of progress in the theory of stochastic processes.

Download Harmonic Analysis and the Theory of Probability (D ...pdf

Read Online Harmonic Analysis and the Theory of Probability ...pdf

Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics)

By Salomon Bochner

Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner

Nineteenth-century studies of harmonic analysis were closely linked with the work of Joseph Fourier on the theory of heat and with that of P. S. Laplace on probability. During the 1920s, the Fourier transform developed into one of the most effective tools of modern probabilistic research; conversely, the demands of the probability theory stimulated further research into harmonic analysis.

Mathematician Salomon Bochner wrote a pair of landmark books on the subject in the 1930s and 40s. In this volume, originally published in 1955, he adopts a more probabilistic view and emphasizes stochastic processes and the interchange of stimuli between probability and analysis. Non-probabilistic topics include Fourier series and integrals in many variables; the Bochner integral; the transforms of Plancherel, Laplace, Poisson, and Mellin; applications to boundary value problems, to Dirichlet series, and to Bessel functions; and the theory of completely monotone functions.

The primary significance of this text lies in the last two chapters, which offer a systematic presentation of an original concept developed by the author and partly by LeCam: Bochner's characteristic functional, a Fourier transform on a Euclidean-like space of infinitely many dimensions. The characteristic functional plays a role in stochastic processes similar to its relationship with numerical random variables, and thus constitutes an important part of progress in the theory of stochastic processes.

Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner Bibliography

- Sales Rank: #2921251 in Books
- Published on: 2005-08-27
- Released on: 2005-08-27
- Original language: English
- Number of items: 1
- Dimensions: 8.50" h x .41" w x 5.51" l, .44 pounds
- Binding: Paperback
- 192 pages

⬇ **Download** Harmonic Analysis and the Theory of Probability (D ...pdf

▤ **Read Online** Harmonic Analysis and the Theory of Probability ...pdf

Download and Read Free Online Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner

Editorial Review

Users Review

From reader reviews:

Patrick Spradlin:

Reading a guide can be one of a lot of task that everyone in the world adores. Do you like reading book so. There are a lot of reasons why people enjoyed. First reading a e-book will give you a lot of new info. When you read a publication you will get new information simply because book is one of many ways to share the information or perhaps their idea. Second, reading a book will make anyone more imaginative. When you looking at a book especially fictional book the author will bring you to definitely imagine the story how the figures do it anything. Third, you can share your knowledge to other people. When you read this Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics), it is possible to tells your family, friends along with soon about yours e-book. Your knowledge can inspire others, make them reading a book.

Bobby Hall:

The book untitled Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) contain a lot of information on the idea. The writer explains your ex idea with easy means. The language is very straightforward all the people, so do definitely not worry, you can easy to read this. The book was compiled by famous author. The author brings you in the new period of literary works. You can actually read this book because you can read on your smart phone, or product, so you can read the book with anywhere and anytime. In a situation you wish to purchase the e-book, you can open up their official web-site as well as order it. Have a nice learn.

Josephine McIntire:

You are able to spend your free time to read this book this e-book. This Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) is simple to deliver you can read it in the park, in the beach, train and also soon. If you did not have got much space to bring often the printed book, you can buy the particular e-book. It is make you quicker to read it. You can save the book in your smart phone. So there are a lot of benefits that you will get when one buys this book.

Becky Duncan:

As we know that book is very important thing to add our understanding for everything. By a reserve we can know everything we really wish for. A book is a pair of written, printed, illustrated or even blank sheet. Every year was exactly added. This reserve Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) was filled regarding science. Spend your time to add your knowledge about your scientific

disciplines competence. Some people has different feel when they reading the book. If you know how big benefit of a book, you can sense enjoy to read a guide. In the modern era like today, many ways to get book that you wanted.

Download and Read Online Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner #KJ02WYEO8TG

Read Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner for online ebook

Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner books to read online.

Online Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner ebook PDF download

Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner Doc

Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner Mobipocket

Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner EPub

KJ02WYEO8TG: Harmonic Analysis and the Theory of Probability (Dover Books on Mathematics) By Salomon Bochner