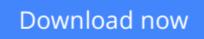


# Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics)

Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang



<u>Click here</u> if your download doesn"t start automatically

# Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics)

Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang

## **Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics)** Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang

The Dirichlet distribution appears in many areas of application, which include modelling of compositional data, Bayesian analysis, statistical genetics, and nonparametric inference. This book provides a comprehensive review of the Dirichlet distribution and two extended versions, the Grouped Dirichlet Distribution (GDD) and the Nested Dirichlet Distribution (NDD), arising from likelihood and Bayesian analysis of incomplete categorical data and survey data with non-response.

The theoretical properties and applications are also reviewed in detail for other related distributions, such as the inverted Dirichlet distribution, Dirichlet-multinomial distribution, the truncated Dirichlet distribution, the generalized Dirichlet distribution, Hyper-Dirichlet distribution, scaled Dirichlet distribution, mixed Dirichlet distribution, and the generalized Liouville distribution.

Key Features:

- Presents many of the results and applications that are scattered throughout the literature in one single volume.
- Looks at the most recent results such as survival function and characteristic function for the uniform distributions over the hyper-plane and simplex; distribution for linear function of Dirichlet components; estimation via the expectation-maximization gradient algorithm and application; etc.
- Likelihood and Bayesian analyses of incomplete categorical data by using GDD, NDD, and the generalized Dirichlet distribution are illustrated in detail through the EM algorithm and data augmentation structure.
- Presents a systematic exposition of the Dirichlet-multinomial distribution for multinomial data with extra variation which cannot be handled by the multinomial distribution.
- S-plus/R codes are featured along with practical examples illustrating the methods.

Practitioners and researchers working in areas such as medical science, biological science and social science will benefit from this book.

**<u>Download</u>** Dirichlet and Related Distributions: Theory, Metho ...pdf

Read Online Dirichlet and Related Distributions: Theory, Met ...pdf

Download and Read Free Online Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang

#### From reader reviews:

#### Sonia Cramer:

Hey guys, do you desires to finds a new book to see? May be the book with the name Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) suitable to you? The actual book was written by renowned writer in this era. The book untitled Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) is the one of several books that will everyone read now. This kind of book was inspired many people in the world. When you read this guide you will enter the new age that you ever know before. The author explained their plan in the simple way, thus all of people can easily to be aware of the core of this guide. This book will give you a lots of information about this world now. In order to see the represented of the world in this book.

#### **Melvin Lucero:**

Reading a reserve can be one of a lot of action that everyone in the world enjoys. Do you like reading book and so. There are a lot of reasons why people like it. First reading a reserve will give you a lot of new data. When you read a guide you will get new information due to the fact book is one of various ways to share the information or their idea. Second, reading through a book will make you more imaginative. When you studying a book especially fiction book the author will bring that you imagine the story how the figures do it anything. Third, you are able to share your knowledge to other individuals. When you read this Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics), it is possible to tells your family, friends along with soon about yours reserve. Your knowledge can inspire average, make them reading a book.

#### **Christopher Pipkin:**

Often the book Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) has a lot associated with on it. So when you make sure to read this book you can get a lot of benefit. The book was written by the very famous author. The writer makes some research just before write this book. This book very easy to read you can obtain the point easily after scanning this book.

#### **Ophelia Ellis:**

Do you like reading a e-book? Confuse to looking for your favorite book? Or your book was rare? Why so many concern for the book? But any people feel that they enjoy regarding reading. Some people likes examining, not only science book but also novel and Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) as well as others sources were given information for you. After you know how the great a book, you feel desire to read more and more. Science reserve was created for teacher or even students especially. Those textbooks are helping them to add their knowledge. In different case, beside science guide, any other book likes Dirichlet and Related Distributions:

Theory, Methods and Applications (Wiley Series in Probability and Statistics) to make your spare time considerably more colorful. Many types of book like this.

## Download and Read Online Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang #P4JRAT1W5QL

### Read Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) by Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang for online ebook

Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) by Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang 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 Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) by Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang books to read online.

#### Online Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) by Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang ebook PDF download

Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) by Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang Doc

Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) by Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang Mobipocket

Dirichlet and Related Distributions: Theory, Methods and Applications (Wiley Series in Probability and Statistics) by Kai Wang Ng, Guo-Liang Tian, Man-Lai Tang EPub