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978-0-521-51346-3 - Bayesian Nonparametrics

Edited by Nils Lid Hjort, Chris Holmes, Peter Muller and Stephen G. Walker

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## Bayesian Nonparametrics

Bayesian nonparametrics works – theoretically, computationally. The theory provides highly flexible models whose complexity grows appropriately with the amount of data. Computational issues, though challenging, are no longer intractable. All that is needed is an entry point: this intelligent book is the perfect guide to what can seem a forbidding landscape.

Tutorial chapters by Ghosal, Lijoi and Prünster, Teh and Jordan, and Dunson advance from theory, to basic models and hierarchical modeling, to applications and implementation, particularly in computer science and biostatistics. These are complemented by companion chapters by the editors and Griffin and Quintana, providing additional models, examining computational issues, identifying future growth areas, and giving links to related topics.

This coherent text gives ready access both to underlying principles and to state-of-the-art practice. Specific examples are drawn from information retrieval, neuro-linguistic programming, machine vision, computational biology, biostatistics, and bioinformatics.

NILS LID HJORT is Professor of Mathematical Statistics in the Department of Mathematics at the University of Oslo.

CHRIS HOLMES is Professor of Biostatistics in the Department of Statistics at the University of Oxford.

PETER MÜLLER is Professor in the Department of Biostatistics at the University of Texas M. D. Anderson Cancer Center.

STEPHEN G. WALKER is Professor of Statistics in the Institute of Mathematics, Statistics and Actuarial Science at the University of Kent, Canterbury.

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**Nils Lid Hjort**

*University of Oslo*

**Chris Holmes**

*University of Oxford*

**Peter Müller**

*University of Texas*

*M.D. Anderson Cancer Center*

**Stephen G. Walker**

*University of Kent*



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## Contributors

David B. Dunson  
Institute of Statistics  
and Decision Sciences  
Duke University  
Durham, NC 27708-0251, USA

Subhashis Ghosal  
Department of Statistics  
North Carolina State University  
Raleigh, NC 27695, USA

Jim Griffin  
Institute of Mathematics, Statistics  
and Actuarial Science  
University of Kent  
Canterbury CT2 7NZ, UK

Nils Lid Hjort  
Department of Mathematics  
University of Oslo  
N-0316 Oslo, Norway

Chris Holmes  
Oxford Centre for Gene Function  
University of Oxford  
Oxford OX1 3QB, UK

Michael I. Jordan  
Department of Electrical Engineering  
and Computer Science  
University of California, Berkeley  
Berkeley, CA 94720-1776, USA

Antonio Lijoi  
Department of Economics  
and Quantitative Methods  
University of Pavia  
27100 Pavia, Italy

Peter Müller  
Department of Biostatistics  
M. D. Anderson Cancer Center  
University of Texas  
Houston, TX 77030-4009, USA

Igor Prünster  
Department of Statistics  
and Applied Mathematics  
University of Turin  
10122 Turin, Italy

Fernando Quintana  
Department of Statistics  
Pontifical Catholic University of Chile  
3542000 Santiago, Chile

Yee Whye Teh  
Gatsby Computational  
Neuroscience Unit  
University College London  
London WC1N 3AR, UK

Stephen G. Walker  
Institute of Mathematics, Statistics  
and Actuarial Science  
University of Kent  
Canterbury CT2 7NZ, UK