

Contents

Part I Theory and Methods

Sequential Monte Carlo Methods in Random Intercept Models for Longitudinal Data	3
Danilo Alves, Carmen Armero, Anabel Forte and Nicolas Chopin	
On the Truncation Error of a Superposed Gamma Process	11
Julyan Arbel and Igor Prünster	
On the Study of Two Models for Integer-Valued High-Frequency Data	21
Andrea Cremaschi and Jim E. Griffin	
Identification and Estimation of Principal Causal Effects in Randomized Experiments with Treatment Switching	31
Emanuele Gramuglia	
A Bayesian Joint Dispersion Model with Flexible Links	39
Rui Martins	
Local Posterior Concentration Rate for Multilevel Sparse Sequences	51
Eduard Belitser and Nurzhan Nurushev	
Likelihood Tempering in Dynamic Model Averaging	67
Jan Reichl and Kamil Dedecius	
Localization in High-Dimensional Monte Carlo Filtering	79
Sylvain Robert and Hans R. Künsch	
Linear Inverse Problem with Range Prior on Correlations and Its Variational Bayes Inference	91
Ondřej Tichý and Václav Šmídl	

Part II Applications and Case Studies

Bayesian Hierarchical Model for Assessment of Climate Model Biases	105
Maeregu Woldeyes Arisido, Carlo Gaetan, Davide Zanchettin and Angelo Rubino	
An Application of Bayesian Seemingly Unrelated Regression Models with Flexible Tails	115
Charles Au and S.T. Boris Choy	
Bayesian Inference of Stochastic Pursuit Models from Basketball Tracking Data	127
Harish S. Bhat, R.W.M.A. Madushani and Shagun Rawat	
Identification of Patient-Specific Parameters in a Kinetic Model of Fluid and Mass Transfer During Dialysis	139
Camilla Bianchi, Ettore Lanzarone, Giustina Casagrande and Maria Laura Costantino	
A Bayesian Nonparametric Approach to Ecological Risk Assessment	151
Guillaume Kon Kam King, Julyan Arbel and Igor Prünster	
Approximate Bayesian Computation Methods in the Identification of Atmospheric Contamination Sources for DAPPLE Experiment	161
Piotr Kopka, Anna Wawrzynczak and Mieczyslaw Borysiewicz	
Bayesian Survival Analysis to Model Plant Resistance and Tolerance to Virus Diseases	173
Elena Lázaro, Carmen Armero and Luis Rubio	
Randomization Inference and Bayesian Inference in Regression Discontinuity Designs: An Application to Italian University Grants	183
Federica Licari	
Bayesian Methods for Microsimulation Models	193
Consuelo R. Nava, Cinzia Carota and Ugo Colombino	
A Bayesian Model for Describing and Predicting the Stochastic Demand of Emergency Calls	203
Vittorio Nicoletta, Ettore Lanzarone, Alessandra Guglielmi, Valérie Bélanger and Angel Ruiz	
Flexible Parallel Split-Merge MCMC for the HDP	213
Debora Parisi and Stefania Perego	

**Bayesian Inference for Continuous Time Animal Movement
Based on Steps and Turns 223**
Alison Parton, Paul G. Blackwell and Anna Skarin

**Explaining the Lethality of Boko Haram’s Terrorist Attacks
in Nigeria, 2009–2014: A Hierarchical Bayesian Approach 231**
André Python, Janine Illian, Charlotte Jones-Todd
and Marta Blangiardo

**Optimizing Movement of Cooperating Pedestrians by Exploiting
Floor-Field Model and Markov Decision Process 241**
Vladimíra Sečkářová and Pavel Hrabák



<http://www.springer.com/978-3-319-54083-2>

Bayesian Statistics in Action

BAYSM 2016, Florence, Italy, June 19-21

Argiento, R.; Lanzarone, E.; Antoniano Villalobos, I.;

Mattei, A. (Eds.)

2017, IX, 251 p. 56 illus., 44 illus. in color., Hardcover

ISBN: 978-3-319-54083-2