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Nota di contenuto	Introduction -- F. Denti, C. Balocchi, G. Capitoli, Segmenting Brain MALDI-MSI Data under Separate Exchangeability -- M. Giordano, A Bayesian Approach with Gaussian Priors to the Inverse Problem of Source Identification in Elliptic PDEs -- M. Chapman-Rounds, M. Pereira, Phase I Dose Escalation Trials in Cancer Immunotherapy: Modifying the Bayesian Logistic Regression Model for Cytokine Release Syndrome -- A. Avalos-Pacheco, A. Lazzerini, M. Lupparelli, F. Claudio Stingo, A Bayesian Multiple Ising Model -- R. H. Mena, M. Ruggiero, A. Singh, Bayesian Nonparametric Estimation of Time-Varying Macroeconomic Tail Risk -- M. Dalla Pria, M. Ruggiero, D. Spanò, A Metropolis–Hastings Algorithm for Sampling Coagulated Partitions -- F. Gaffi, Conditionally Partially Exchangeable Partitions for Dynamic Networks.
Sommario/riassunto	By integrating cutting-edge statistical research with diverse applications, this book serves as both a reference and an inspiration for those interested in advancing Bayesian methodologies. This volume brings together a collection of research contributions that highlight the versatility and power of Bayesian methods in tackling complex problems across a variety of fields. The chapters reflect the latest advances in Bayesian theory, methodology, and computation, offering

novel approaches to analyze data characterized by high dimensionality, structural dependencies, and dynamic behavior. From segmenting mass spectrometry imaging data to modeling dynamic networks and assessing macroeconomic tail risks, this book showcases how advanced Bayesian methods can provide transformative insights while maintaining interpretability and computational feasibility. Whether it's addressing challenges in biomedicine, where data often come with hierarchical structures and non-standard distributions, or in economics, where time-varying risks demand adaptive models, the contributions in this book demonstrate the unparalleled capacity of Bayesian methods to model, predict, and interpret complex phenomena. Importantly, they also address the need for theoretical guarantees and computational efficiency, making these methods accessible for real-world applications. This volume highlights the versatility of Bayesian methods in tackling diverse, complex problems across disciplines. The chapters reflect the latest advances in statistical theory, computational techniques, and real-world applications. Readers will find innovative solutions for high-dimensional data analysis, clinical trial design, dynamic network modeling, macroeconomic risk assessment, and more. By integrating theory and practice, this book serves as a valuable resource for statisticians, researchers, and practitioners seeking to explore the frontiers of Bayesian inference. The volume gathers contributions presented at the Bayesian Young Statisticians Meeting (BAYSM) 2023, the official conference of j-ISBA, the junior section of the International Society for Bayesian Analysis, together with some more invited papers from additional contributors. This prestigious event provides a platform for early-career researchers to showcase innovative work and engage in discussions that shape the future of Bayesian statistics. The inclusion of some additional contributions highlights the vibrancy and creativity of the next generation of Bayesian statisticians, offering a glimpse into cutting-edge methodologies and their diverse applications. The discussions and feedback from BAYSM 2023 have undoubtedly enriched these works, underscoring the collaborative and dynamic nature of the Bayesian research community.

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