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Descrizione fisica	1 online resource (338 p.)
Collana	Wiley Series in Probability and Statistics
Classificazione	MAT029000
Disciplina	515.782 519.2/4
Soggetti	Distribution (Probability theory) Dirichlet problem
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Dirichlet and Related Distributions: Theory, Methods and Applications; Contents; Preface; Acknowledgments; List of abbreviations; List of symbols; List of figures; List of tables; 1 Introduction; 1.1 Motivating examples; 1.2 Stochastic representation and the $d=$ operator; 1.2.1 Definition of stochastic representation; 1.2.2 More properties on the $d=$ operator; 1.3 Beta and inverted beta distributions; 1.4 Some useful identities and integral formulae; 1.4.1 Partial-fraction expansion; 1.4.2 Cambanis-Keener-Simons integral formulae; 1.4.3 Hermite-Genocchi integral formula 1.5 The Newton-Raphson algorithm 1.6 Likelihood in missing-data problems; 1.6.1 Missing-data mechanism; 1.6.2 The expectation- maximization (EM) algorithm; 1.6.3 The expectation/conditional maximization (ECM) algorithm; 1.6.4 The EM gradient algorithm; 1.7 Bayesian MDPs and inversion of Bayes' formula; 1.7.1 The data augmentation (DA) algorithm; 1.7.2 True nature of Bayesian MDP: inversion of Bayes' formula; 1.7.3 Explicit solution to the DA integral

equation; 1.7.4 Sampling issues in Bayesian MDPs; 1.8 Basic statistical distributions; 1.8.1 Discrete distributions
 1.8.2 Continuous distributions
 2 Dirichlet distribution; 2.1 Definition and basic properties; 2.1.1 Density function and moments; 2.1.2 Stochastic representations and mode; 2.2 Marginal and conditional distributions; 2.3 Survival function and cumulative distribution function; 2.3.1 Survival function; 2.3.2 Cumulative distribution function; 2.4 Characteristic functions; 2.4.1 The characteristic function of $u \sim U(T_n)$; 2.4.2 The characteristic function of $v \sim U(T_n)$; 2.4.3 The characteristic function of a Dirichlet random vector; 2.5 Distribution for linear function of a Dirichlet random vector
 2.5.1 Density for linear function of $v \sim U(V_n)$ 2.5.2 Density for linear function of $u \sim U(T_n)$; 2.5.3 A unified approach to linear functions of variables and order statistics; 2.5.4 Cumulative distribution function for linear function of a Dirichlet random vector; 2.6 Characterizations; 2.6.1 Mosimann's characterization; 2.6.2 Darroch and Ratcliff's characterization; 2.6.3 Characterization through neutrality; 2.6.4 Characterization through complete neutrality; 2.6.5 Characterization through global and local parameter independence; 2.7 MLEs of the Dirichlet parameters
 2.7.1 MLE via the Newton-Raphson algorithm 2.7.2 MLE via the EM gradient algorithm; 2.7.3 Analyzing serum-protein data of Pekin ducklings; 2.8 Generalized method of moments estimation; 2.8.1 Method of moments estimation; 2.8.2 Generalized method of moments estimation; 2.9 Estimation based on linear models; 2.9.1 Preliminaries; 2.9.2 Estimation based on individual linear models; 2.9.3 Estimation based on the overall linear model; 2.10 Application in estimating ROC area; 2.10.1 The ROC curve; 2.10.2 The ROC area; 2.10.3 Computing the posterior density of the ROC area
 2.10.4 Analyzing the mammogram data of breast cancer

Sommario/riassunto

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 in

2. Record Nr.	UNINA9910798558303321
Titolo	Forms of address in the Spanish of the Americas // edited by Maria Irene Moyna, Susana Rivera-Mills
Pubbl/distr/stampa	Amsterdam, [Netherlands] ; ; Philadelphia, [Pennsylvania] : , : John Benjamins Publishing Company, , 2016 ©2016
Descrizione fisica	1 online resource (364 pages)
Collana	Issues in Hispanic and Lusophone Linguistics, , 2213-3887 ; ; Volume 10
Disciplina	467/.98
Soggetti	Spanish language - Address, Forms of Spanish language - Social aspects Spanish language - Pronoun Sociolinguistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.

3. Record Nr.	UNINA9910438034503321
Autore	De Philippis Guido
Titolo	Regularity of optimal transport maps and applications // Guido de Philippis
Pubbl/distr/stampa	Pisa [Italy], : Edizioni della Normale, 2013
ISBN	88-7642-458-X
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (xix, 169 pages) : illustrations
Collana	Theses (Scuola Normale Superiore), , 2239-1460 ; ; 17
Disciplina	510 514
Soggetti	Transportation problems (Programming) Mathematical optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Cover; Title Page; Copyright Page; Table of Contents; Introduction; 1. Regularity of optimal transport maps and applications; 2. Other papers; 1. -convergence of non-local perimeter; 2. Sobolev regularity of optimal transport map and differential inclusions; 3. A non-autonomous chain rule in $W_{1,p}$ and BV; 4. Aleksandrov-Bakelman-Pucci estimate for the infinity Laplacian; 5. Stability for the Plateau problem; 6. Stability for the second eigenvalue of the Stekloff-Laplacian; 7. Regularity of the convex envelope; Chapter 1 An overview on optimal transportation 1.1. The case of the quadratic cost and Brenier Polar Factorization Theorem 1.2. Brenier vs Aleksandrov solutions to the Monge-Ampere equation; 1.2.1. Brenier solutions; 1.2.2. Aleksandrov solutions; 1.3. The case of a general cost $c(x, y)$; 1.3.1. Existence of optimal maps; 1.3.2. Regularity of optimal maps and the MTW condition; Chapter 2 The Monge-Ampere equation; 2.1. Aleksandrov maximum principle; 2.2. Sections of solutions of the Monge-Ampere equation and Caffarelli regularity theorems; 2.3. Existence of smooth solutions to the Monge-Ampere equation Chapter 3 Sobolev regularity of solutions to the Monge Ampere equation 3.1. Proof of Theorem 3.1; 3.2. Proof of Theorem 3.2; 3.2.1. A direct proof of Theorem 3.8; 3.2.2. A proof by iteration of the $L \log L$ estimate; 3.3. A simple proof of Caffarelli $W_{2,p}$ estimates; Chapter 4

Second order stability for the Monge-Ampere equation and applications; 4.1. Proof of Theorem 4.1; 4.2. Proof of Theorem 4.2; Chapter 5 The semigeostrophic equations; 5.1. The semigeostrophic equations in physical and dual variables; 5.2. The 2-dimensional periodic case; 5.2.1. The regularity of the velocity field 5.2.2. Existence of an Eulerian solution 5.2.3. Existence of a Regular Lagrangian Flow for the semigeostrophic velocity field; 5.3. The 3-dimensional case; Chapter 6 Partial regularity of optimal transport maps; 6.1. The localization argument and proof of the results; 6.2. C^1 , regularity and strict c - convexity; 6.3. Comparison principle and C^2 , regularity; Appendix A Properties of convex functions; Appendix B A proof of John lemma; References; THESESES; Published volumes; Volumes published earlier

Sommario/riassunto

In this thesis, we study the regularity of optimal transport maps and its applications to the semi-geostrophic system. The first two chapters survey the known theory, in particular there is a self-contained proof of Brenier' theorem on existence of optimal transport maps and of Caffarelli's Theorem on Holder continuity of optimal maps. In the third and fourth chapter we start investigating Sobolev regularity of optimal transport maps, while in Chapter 5 we show how the above mentioned results allows to prove the existence of Eulerian solution to the semi-geostrophic equation. In Chapter 6 we prove partial regularity of optimal maps with respect to a generic cost functions (it is well known that in this case global regularity can not be expected). More precisely we show that if the target and source measure have smooth densities the optimal map is always smooth outside a closed set of measure zero.
