

1. Record Nr.	UNINA9910458434803321
Autore	Czerwik Stefan
Titolo	Functional equations and inequalities in several variables [[electronic resource] /] / Stefan Czerwik
Pubbl/distr/stampa	River Edge, N.J., : World Scientific, c2002
ISBN	981-277-811-X
Descrizione fisica	1 online resource (ix, 410 p.)
Disciplina	515.75
Soggetti	Functional equations Inequalities (Mathematics) Electronic books.
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.
Nota di contenuto	Functional Equations and Inequalities in Linear Spaces: Linear Spaces and Semilinear Topology; Convex Functions; Cauchy's Exponential Equation; Polynomial Functions and Their Extensions; Quadratic Mappings; Quadratic Equation on an Interval; Ulam-Hyers-Rassias Stability of Functional Equations: Additive Cauchy Equation; Multiplicative Cauchy Equation; Jensen's Functional Equation; Gamma Functional Equation; Stability of Homogeneous Mappings; Stability of Functional Equations in Function Spaces; Stability in the Lipschitz Norms; Round-off Stability of Iterations; Functional Equations in Set-Valued Functions: Cauchy's Set-Valued Functional Equation; Pexider's Functional Equation; Subadditive Set-Valued Functions; Hahn-Banach Type Theorem and Applications; Subquadratic Set-Valued Functions; Iteration Semigroups of Set-Valued Functions.
Sommario/riassunto	An outline of the theory of functional equations and inequalities in several variables. The work is divided into three parts, addressing: functional equations and inequalities in linear spaces; Ulam-Hyers-Rassias stability of functional equations; and functional equations in set-valued functions.

2. Record Nr.	UNINA9910829979303321
Autore	Zeltermann Daniel
Titolo	Discrete distributions [[electronic resource] ] : applications in the health sciences / / Daniel Zeltermann
Pubbl/distr/stampa	Hoboken, NJ, : John Wiley, 2004
ISBN	1-280-23879-8 9786610238798 0-470-34589-6 0-470-86890-2 0-470-86889-9
Descrizione fisica	1 online resource (307 p.)
Collana	Wiley series in probability and statistics
Disciplina	519.24 519.2402461 610/.1/5118
Soggetti	Medical sciences - Mathematics Medical sciences - Mathematical models Medicine - Mathematics Distribution (Probability theory) Probabilities
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 (p. 267-272) and index.
Nota di contenuto	Discrete Distributions; Contents; Preface; Acknowledgements; About the Author; 1 Introduction; 1.1 Discrete Distributions in General; 1.2 Multivariate Discrete Distributions; 1.3 Binomial Distribution; 1.4 The Multinomial Distribution; 1.5 Poisson Distribution; 1.6 Negative Binomial Distribution; 1.7 Hypergeometric Distribution; 1.7.1 Negative hypergeometric distribution; 1.7.2 Extended hypergeometric distribution; 1.8 Stirling's Approximation; 2 Maximum Negative Binomial Distribution; 2.1 Introduction; 2.1.1 Outfitting the ark; 2.1.2 Medical screening application; 2.2 Elementary Properties 2.2.1 Shapes of the distribution2.2.2 Moments of the distribution; 2.2.3 Modes of the distribution; 2.3 Asymptotic Approximations; 2.3.1 Large values of c and p 1/2; 2.3.2 Large values of c and p = 1/2; 2.3.3

Extreme values of  $p$ ; 2.4 Estimation of  $p$ ; 2.4.1 The likelihood function; 2.4.2 The EM estimate; 2.4.3 A Bayesian estimate of  $p$ ; 2.5 Programs and Numerical Results; 2.6 Appendix: The Likelihood Kernel; 3 The Maximum Negative Hypergeometric Distribution; 3.1 Introduction; 3.2 The Distribution; 3.3 Properties and Approximations; 3.3.1 Modes of the distribution; 3.3.2 A gamma approximation; 3.3.3 A half-normal approximation; 3.3.4 A normal approximation; 3.4 Estimation; 3.5 Appendix; 3.5.1 The half-normal approximation; 3.5.2 The normal approximate distribution; 4 Univariate Discrete Distributions for Use with Twins; 4.1 Introduction; 4.2 The Univariate Twins Distribution; 4.3 Measures of Association in Twins; 4.4 The Danish Twin Registry; 4.4.1 Estimate of the effect; 4.4.2 Approximations; 4.5 Appendix; 4.5.1 The univariate twins distribution; 4.5.2 Approximating distributions; 4.6 Programs for the Univariate Twins Distribution; 5 Multivariate Distributions for Twins; 5.1 Introduction; 5.2 Conditional Distributions; 5.2.1 Univariate conditional distribution; 5.2.2 Conditional association measure; 5.3 Conditional inference for the Danish twins; 5.4 Simultaneous Multivariate Distributions; 5.5 Multivariate Examination of the Twins; 5.6 Infinitesimal Multivariate Methods; 5.6.1 Models with no dependence; 5.6.2 Models for dependence; 5.6.3 The infinitesimal data; 5.7 Computer Programs; 5.7.1 Conditional distribution and association models in SAS; 5.7.2 Fortran program for multivariate inference; 6 Frequency Models for Family Disease Clusters; 6.1 Introduction; 6.1.1 Examples; 6.1.2 Sampling methods employed; 6.1.3 Incidence and clustering; 6.2 Exact Inference Under Homogeneous Risk; 6.2.1 Enumeration algorithm; 6.2.2 Ascertainment sampling; 6.3 Numerical Examples; 6.3.1 IPF in COPD families; 6.3.2 Childhood cancer syndrome; 6.3.3 Childhood mortality in Brazil; 6.3.4 Household *T. cruzi* infections; 6.4 Conclusions; 6.5 Appendix: Mathematical Details; 6.5.1 The distribution of family frequencies; 6.5.2 A model for covariates; 6.5.3 Ascertainment sampling; 6.6 Program for Exact Test of Homogeneity; 7 Sums of Dependent Bernoulli's and Disease Clusters; 7.1 Introduction

## Sommario/riassunto

There have been many advances in the theory and applications of discrete distributions in recent years. They can be applied to a wide range of problems, particularly in the health sciences, although a good understanding of their properties is very important. Discrete Distributions: Applications in the Health Sciences describes a number of new discrete distributions that arise in the statistical examination of real examples. For each example, an understanding of the issues surrounding the data provides the motivation for the subsequent development of the statistical models. Provid