Open Journal of Statistics





www.scirp.org/journal/ojs

Journal Editorial Board

ISSN 2161-718X (Print) ISSN 2161-7198 (Online) http://www.scirp.org/journal/ojs

Editor-in-Chief

Prof. Qihua Wang

Editorial Board

Prof. Ana M. Aguilera Prof. Essam K. Al-Hussaini **Prof. Erniel B. Barrios** Prof. Alexander V. Bulinski Prof. Junsoo Lee Prof. Tae-Hwy Lee Dr. Qizhai Li Dr. Xuewen Lu Prof. Claudio Morana Prof. Thu Pham-Gia Prof. Gengsheng Qin Prof. Kalyan Raman Prof. Mohammad Z. Raqab Dr. Jose Antonio Roldán-Nofuentes Prof. Sunil K. Sapra Prof. Raghu Nandan Sengupta Prof. Siva Sivaganesan Prof. Jianguo Sun **Prof. Aida Toma** Dr. Haiyan Wang Prof. Augustine Chi Mou Wong Dr. Peng Zeng Dr. Jin-Ting Zhang Prof. Yichuan Zhao Dr. Wang Zhou

Chinese Academy of Sciences, China

.

University of Granada, Spain Alexandria University, Egypt University of the Philippines, Philippines Lomonosov Moscow State University, Russia University of Alabama, USA University of California, Riverside, USA Chinese Academy of Sciences, China University of Calgary, Canada University of Milano-Bicocca, Italy University of Moncton, Canada Georgia State University, USA Northwestern University, USA University of Jordan, Jordan University of Granada, Spain California State University, Los Angeles, USA Indian Institute of Technology Kanpur, India University of Cincinnati, USA University of Missouri, USA Academy of Economic Studies, Romania Kansas State University, USA York University, Canada Auburn University, USA National University of Singapore, Singapore Georgia State University, USA National University of Singapore, Singapore



Table of Contents

Volume 8	Number 2	April 2018
Causal Measure	es for Prognostic and Predictive Biomarkers	
Y. Chiba		
An Extended B Contingency T	ivariate T-Distribution Type Symmetry Model for ables	r Square
K. Iki, M. Oka	da, S. Tomizawa	
Development o Are Unequal	f New LSD Formula when Numbers of Observation	ons
A. A. Al-Fahha	am	
Maximum Entr and Moment G	copy Empirical Likelihood Methods Based on Biva enerating Functions	riate Laplace Transforms
A. Luong		
Extending the lin Linear Regre	Behrens-Fisher Problem to Testing Equality of Slo ession: The Bayesian Approach	ppes
M. Shoukri, F	. Al-Mohanna	
A Multi-Stage (in a Restaurant	Queue Approach to Solving Customer Congestion	Problem
A. S. Ajiboye,	K. A. Saminu	
Statistical Anal Regression App	ysis of Variables Influencing Type of Birth in Sri	Lanka: A Logistic
H. P. R. R. Pa	thirana, N. Varathan	
The Existence a	and Uniqueness of Solutions for Mean-Reverting	y-Process
J. Y. Liao		
An Implicit-Ex for Pricing Fina	plicit Computational Method Based on Time Sem ancial Derivatives with Jumps	i-Discretization
Y. Wang		
Partial Functio	nal Linear Models with ARCH Errors	
Y. F. Wang, T.	F. Xie, Z. Z. Zhang	



Simulated Minimum Quadratic Distance Methods Using Grouped Data for Some Bivariate Continuous Models

A. Luong	362		
Comparison of Methods of Estimating Missing Values in Time Series			
I. S. Iwueze, E. C. Nwogu, V. U. Nlebedim, U. I. Nwosu, U. E. Chinyem	390		

The figure on the front cover is from the article published in Open Journal of Statistics, 2018, Vol. 8, No. 2, pp. 302-316 by Adegoke S. Ajiboye and Kayode A. Saminu.

Open Journal of Statistics (OJS) Journal Information

SUBSCRIPTIONS

The *Open Journal of Statistics* (Online at Scientific Research Publishing, <u>www.SciRP.org</u>) is published bimonthly by Scientific Research Publishing, Inc., USA.

Subscription rates: Print: \$69 per issue. To subscribe, please contact Journals Subscriptions Department, E-mail: <u>sub@scirp.org</u>

SERVICES

Advertisements Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies) Reprints Co-ordinator, Scientific Research Publishing, Inc., USA. E-mail: <u>sub@scirp.org</u>

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2018 by Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/

Copyright for individual papers of the journal:

Copyright © 2018 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact: E-mail: ojs@scirp.org

Call for Papers



Open Journal of Statistics

ISSN 2161-718X (Print) ISSN 2161-7198 (Online) http://www.scirp.org/journal/ojs

Open Journal of Statistics (OJS) is an international journal dedicated to the latest advancement of statistics. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of statistics.

Editor-in-Chief

Prof. Qihua Wang

Editorial Board

Prof. Ana M. Aguilera Prof. Essam K. Al-Hussaini Prof. Erniel B. Barrios Prof. Alexander V. Bulinski Prof. Junsoo Lee Prof. Tae-Hwy Lee Dr. Qizhai Li Dr. Xuewen Lu Prof. Claudio Morana

Subject Coverage

Chinese Academy of Sciences, China

Prof. Thu Pham-Gia Prof. Gengsheng Qin Prof. Kalyan Raman Prof. Mohammad Z. Raqab Dr. Jose Antonio Roldán-Nofuentes Prof. Sunil K. Sapra Prof. Raghu Nandan Sengupta Prof. Siva Sivaganesan Prof. Jianguo Sun Prof. Aida Toma Dr. Haiyan Wang Prof. Augustine Chi Mou Wong Dr. Peng Zeng Dr. Jin-Ting Zhang Prof. Yichuan Zhao Dr. Wang Zhou

This journal invites original research and review papers that address the following issues in statistics. Topics of interest include, but are not limited to:

- Actuarial science
- Applied information economics
- Asymptotic statistics
- Bayesian statistics
- Biostatistics
- Business statistics
- ◆ Causal inference
- Chemometrics
- Computational statistics
- ◆ Data mining
- Decision theory
- Demography
- Descriptive statistics
- Design of experiments
- ♦ Econometrics

- Energy statistics
- Engineering statistics
- Epidemiology
- Estimation theory
- Geographic information systems
- ◆ Graphic models and related theory
- High dimensional data analysis
- ◆ Image processing
- ◆ Multivariate analysis
- Non-parametric statistics
- Parametric statistics
- Psychological statistics
- Regression analysis
- Regression an
 Reliability
- Reliability engineering

- Sample survey
- ♦ Sampling theory
- ◆ Semiparametric statistics
- ◆ Social statistics
- ◆ Statistical analysis with complex data
- ♦ Statistical computing
- ◆ Statistical inference
- Statistical methods
- ◆ Survival analysis
- ◆ Theoretic methods
- ♦ Time series analysis

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the OJS.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

http://www.scirp.org/journal/ojs