BERNOULLI

Official Journal of the Bernoulli Society for Mathematical Statistics and Probability

Volume Nineteen Number Four September 2013 ISSN: 1350-7265

Special Issue Commemorating the 300th anniversary of the publication of Ars Conjectandi by Jacob Bernoulli.

Edited by Richard A. Davis (Columbia University) and Thomas Mikosch (University of Copenhagen)

CONTENTS

Editorial	1087
Richard A. Davis and Thomas Mikosch	
Invited Contributors	
SENETA, E.	1088
A Tricentenary history of the Law of Large Numbers	
ALDOUS, D.	1122
Interacting particle systems as stochastic social dynamics	
BELTRAN, J. and LE GALL, JF.	1150
Quadrangulations with no pendant vertices	
BLOCKER, A.W. and MENG, XL.	1176
The potential and perils of preprocessing: Building new foundations	
BÜHLMANN, P.	1212
Statistical significance in high-dimensional linear models	
CHEN, L.H.Y. and RÖLLIN, A.	1243
Approximating dependent rare events	
DECROUEZ, G. and HALL, P.	1268
Normal approximation and smoothness for sums of means of lattice-valued variables	random
DIACONIS, P.	1294
Some things we've learned (about Markov chain Monte Carlo)	
FÖLLMER, H. and SCHIED, A.	1306
Probabilistic aspects of finance	
GNEITING, T.	1327
Strictly and non-strictly positive definite functions on spheres	
(continued on the	inside cover)

The papers published in Bernoulli are indexed or abstracted in *Current Index to Statistics*, *Mathematical Reviews*, *Statisctical Theory and Method Abstracts-Zentralblatt (STMA-Z)*, and *Zentralblatt für Mathematik* (also avalaible on the *MATH via STN* database and *Compact MATH CD-ROM*). A list of forthcoming papers can be found online at http://www.bernoulli-society.org/index.php/publications/bernoulli-journal/bernoulli-journal-papers

BERNOULLI

Official Journal of the Bernoulli Society for Mathematical Statistics and Probability

Volume Nineteen Number Four September 2013 ISSN: 1350-7265

CONTENTS

(Continued)

Invited Contributors

Stability

HIRSCH, F. and YOR, M.	1350
On the Mellin transforms of the perpetuity and the remainder variables associated to a subordinator	•
JORDAN, M.I.	1378
On statistics, computation and scalability	
KÜNSCH, H.R.	1391
Particle filters	
REID, N.	1404
Aspects of likelihood inference	
RESNICK, S.I. and ZEBER, D.	1419
Clustering of Markov chain exceedances	
TAYLOR, J.	1449
The geometry of least squares in the 21st century	
DAI, B., DING, S. and WAHBA, G.	1465
Multivariate Bernoulli distribution	
YU, B.	1484