## STATISTICAL SCIENCE

## Volume 31, Number 3

August 2016

A Review of Nonparametric Hypothesis Tests of Isotropy Properties in Spatial Data	205
Zachary D. Weller and Jennifer A. Hoeting	305
Rank Tests from Partially Ordered Data Using Importance and MCMC Sampling Methods	
Debashis Mondal and Nina Hinrichs	325
On Negative Outcome Control of Unobserved Confounding as a Generalization of	
Difference-in-Differences	
Joel Schwartz and Eric J. Tchetgen Tchetgen	348
Quantum Annealing with Markov Chain Monte Carlo Simulations and D-Wave Quantum	
Computers Yazhen Wang, Shang Wu and Jian Zou	362
Markov Chains as Models in Statistical Mechanics	399
Fractional Imputation in Survey Sampling: A Comparative Review	
Shu Yang and Jae Kwang Kim	415
A Conversation with Michael Woodroofe Moulinath Banerjee and Bodhisattva Sen	433
A Conversation with Arthur Cohen	442
A Conversation with Estate V. Khmaladze	453

Statistical Science [ISSN 0883-4237 (print); ISSN 2168-8745 (online)], Volume 31, Number 3, August 2016. Published quarterly by the Institute of Mathematical Statistics, 3163 Somerset Drive, Cleveland, OH 44122, USA. Periodicals postage paid at Cleveland, Ohio and at additional mailing offices.

**POSTMASTER:** Send address changes to *Statistical Science*, Institute of Mathematical Statistics, Dues and Subscriptions Office, 9650 Rockville Pike—Suite L2310, Bethesda, MD 20814-3998, USA.

Copyright © 2016 by the Institute of Mathematical Statistics Printed in the United States of America