APPLIED PROBABILITY TRUST PRIZES 2016

The Trustees of the Applied Probability Trust (APT) have much pleasure in announcing the names of the APT Prize winners for 2016. We offer them our warmest congratulations, and look forward to their pursuing further studies and eventually careers in probability, statistics and their applications.

DARYL DALEY
June 2017 for the APT Trustees

The following prize awards for undergraduate and postgraduate achievement in 2016 were funded by the Applied Probability Trust.

University of Adelaide (Applied Probability Trust Prize) . . . . . Caitlin Gray
Australian National University (Applied Probability Trust Prize) . . . . . Tiancheng Huang
University of California, Santa Barbara (Abraham Wald Prize)
(2015) . . . . . Zhipu Zhou
(2016) . . . . . Aditya Maheshwari
University of Cambridge (Bartlett Prize) . . . . . Igor Spasojevic
CWI, Amsterdam (Applied Probability Trust Prize) . . . . . Not awarded in 2016
Imperial College, London (Hyman Levy Prize) . . . . . Scott Alexander Ward
University of Kentucky (R. L. Anderson Prize) . . . . . Jin Xie
University of Manchester (M. S. Bartlett Prize) . . . . . Yuxi Liu
University of Melbourne (Norma McArthur Prize) . . . . . Yoshua Wakeham
University of Newcastle, New South Wales (Applied Probability Trust
Statistics Prize) . . . . . Thomas McCallum
The Open University (George Barnard Prize) . . . . . Michael Jarvis
University of Sheffield (Sir Edward Collingwood Prize) . . . . . Hanye Zhu
and Kaori Momoki
University of Sydney (Applied Probability Trust Prize) . . . . . Gabriel Gregory
University of Waterloo (George Barnard Prize) . . . . . Rey Malile
University of Western Australia
Richard Tweedie Memorial Applied Probability Trust Prize . . . . . Michael Ashfield
Abraham Wald Prize . . . . . Zhichao Dong
University of Wollongong
(William Sealy Gosset Prize) . . . . . Jacob Bradd
(Applied Probability Trust Prize) . . . . . Dang Minh Quan Vu

https://doi.org/10.1017/jpr.2017.3 Published online by Cambridge University Press

ROLLO DAVIDSON TRUST

The Trustees of the Rollo Davidson Trust give notice that they have awarded the Rollo Davidson Prize for 2017 jointly to

Jian Ding (University of Chicago) for his achivements on mixing and cover times and on the random k-SAT conjecture, and **Nike Sun** (University of California at Berkeley) for her achievements in probability theory and specifically on the random k-SAT conjecture.

Further details of the Rollo Davidson Trust may be found at http://www.statslab.cam.ac.uk/Rollo/

https://doi.org/10.1017/jpr.2017.3 Published online by Cambridge University Press

Subscription rates

Subscription rates for volume **54** (2017) of *Journal of Applied Probability* (*JAP*) are as follows (post free and online access at http://cambridge.org/jpr). For libraries and institutions: US$361.00, £233.00 (online only); US$397.00, £256.00 (online & print). For individuals, US$137.00, £88.00 (online & print). The subscription rates for volume **49** (2017) of *Advances in Applied Probability*, the companion publication, are the same; for individual subscribers that order both journals at the same time, the combined price is discounted by 10%. Please send all subscription renewals and enquiries to: subscriptions_newyork@cambridge.org in the Americas and journals@cambridge.org for the Rest of the World.

Notes for contributors

A submission to Applied Probability is considered as a submission to either *Journal of Applied Probability* (JAP) or *Advances in Applied Probability* (AAP). Longer papers are typically published in AAP, but the assignation of papers between the two journals is made by the Editor-in-Chief on an issue-by-issue basis. Short communications and letters specifically relating to papers appearing in either JAP or AAP are published in JAP.

Papers submitted to the Applied Probability journals are considered on the understanding that they have not been published previously and are not under consideration by another publication. Accepted papers will not be published elsewhere without the written permission of the Trust. Submitted papers should be in English. It is the author's responsibility to ensure an acceptable standard of language, and a paper failing to meet this requirement may go back to the author for rewriting before being sent out for review.

Papers should include: (i) a **short abstract** of 4–10 lines giving a non-mathematical description of the subject matter and results; (ii) a list of **keywords** detailing the contents; and (iii) a list of **classifications**, using the 2010 Mathematics Subject Classification scheme (http://www.ams.org/msc/). Letters to the Editor need not include these. To assist authors in writing papers in the Applied Probability style, they may use the LaTeX class file aptpub.cls, available from http://www.appliedprobability.org/. Use of this class file is not a condition of submission, but will considerably increase the speed at which papers are processed.

Papers should be submitted as portable document format (PDF) files, not exceeding 1 Mb, to the email address **submissions_japaap@sheffield.ac.uk**. All submissions will be acknowledged on receipt.

Copyright

The copyright of all published papers is vested in the Applied Probability Trust. When a paper is accepted for publication, the Trust asks the authors to assign copyright by signing a form in which the terms of copyright are listed. Failure to do this promptly may delay or prevent publication.

Authorisation to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by the Applied Probability Trust for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the corresponding processing and royalty fees (see http://www.copyright.com) are paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923, USA. 0021–9002/17

PRINTED IN THE UK AT BELL AND BAIN LTD

MIX
Paper from responsible sources
FSC www.fsc.org FSC ° C007785

https://doi.org/10.1017/jpr.2017.3 Published online by Cambridge University Press

Volume 54 Number 2

Research Papers

343 FABRICIO SIQUEIRA BENEVIDES AND MAŁGORZATA SULKOWSKA. Percolation and best-choice problem for powers of paths

363 MARKOS V. KOUTRAS AND DEMETRIOS P. LYBEROPOULOS. New maximal inequalities for N-demimartingales with scan statistic applications

379 A. TOOMAJ, S. M. SUNOJ AND J. NAVARRO. Some properties of the cumulative residual entropy of coherent and mixed systems

394 LUC DEVROYE, LÁSZLÓ GYÖRFI, GÁBOR LUGOSI AND HARRO WALK. On the measure of Voronoi cells

409 YUN ZENG AND CATHY HONGHUI XIA. Optimal bulking threshold of batch service queues

424 JE GUK KIM. On the convergence of the quasi-regression method: polynomial chaos and regularity

444 FANGJUN XU. Second-order limit laws for occupation times of fractional Brownian motion

462 R. LARAKI AND W. SUDDERTH. A continuity question of Dubins and Savage

474 YINGQIU LI, CHUANCUN YIN AND XIAOWEN ZHOU. On the last exit times for spectrally negative Lévy processes

490 PIERRE NYQUIST. Moderate deviation principles for importance sampling estimators of risk measures

507 M. SUVINTHRA AND K. BALACHANDRAN. Large deviations for the stochastic predator–prey model with nonlinear functional response

522 PETER CZUPPON AND PETER PFAFFELHUBER. A spatial model for selection and cooperation

540 KSENIA CHERNYSH AND SANJAY RAMASSAMY. Coupling any number of balls in the infinite-bin model

550 THOMAS O. MCDONALD AND MAREK KIMMEL. Multitype infinite-allele branching processes in continuous time

569 OLLIVIER HYRIEN, KOSTO V. MITOV AND NIKOLAY M. YANEV. Subcritical Sevastyanov branching processes with nonhomogeneous Poisson immigration

588 VLADIMIR VATUTIN AND ELENA DYAKONOVA. Path to survival for the critical branching processes in a random environment

603 DAVID LANDRIAULT, BIN LI AND HONGZHONG ZHANG. A unified approach for drawdown (drawup) of time-homogeneous Markov processes

627 LU-JING HUANG AND YONG-HUA MAO. On some mixing times for nonreversible finite Markov chains

638 K. KAMATANI. Ergodicity of Markov chain Monte Carlo with reversible proposal

Letter to the Editor

655 YAMING YU. Minimum variance in the coupon collector's problem

Published by the **Applied Probability Trust**
Full text available at **Cambridge Core**
Copyright © **Applied Probability Trust** 2017
ISSN 0021–9002

CAMBRIDGE UNIVERSITY PRESS

https://doi.org/10.1017/jpr.2017.3 Published online by Cambridge University Press