

# THE ANNALS *of* APPLIED PROBABILITY

*AN OFFICIAL JOURNAL OF THE*  
INSTITUTE OF MATHEMATICAL STATISTICS

## Articles

|   |      |
|---|------|
| On the stochastic behaviour of optional processes up to random times<br>CONSTANTINOS KARDARAS   | 429  |
| A polynomial time approximation scheme for computing the supremum of Gaussian processes . . . . . RAGHU MEKA  | 465  |
| Viral processes by random walks on random regular graphs<br>MOHAMMED ABDULLAH, COLIN COOPER AND MOEZ DRAIEF   | 477  |
| Central limit theorems for an Indian buffet model with random weights<br>PATRIZIA BERTI, IRENE CRIMALDI, LUCA PRATELLI AND PIETRO RIGO                        | 523  |
| Large deviations for Markovian nonlinear Hawkes processes . . . . . LINGJIONG ZHU   | 548  |
| A generalized backward scheme for solving nonmonotonic stochastic recursions . . . . . P. MOYAL   | 582  |
| Limit theorems for nearly unstable Hawkes processes<br>THIBAUT JAISSON AND MATHIEU ROSENBAUM  | 600  |
| Spatial preferential attachment networks: Power laws and clustering coefficients<br>EMMANUEL JACOB AND PETER MÖRTERS  | 632  |
| On the expected total number of infections for virus spread on a finite network<br>ANTAR BANDYOPADHYAY AND FARKHONDEH SAJADI                                  | 663  |
| Limit theorems for Smoluchowski dynamics associated with critical continuous-state branching processes . . . . GAUTAM IYER, NICHOLAS LEGER AND ROBERT L. PEGO | 675  |
| Exponential moments of affine processes<br>MARTIN KELLER-RESSEL AND EBERHARD MAYERHOFER   | 714  |
| Universality in polytope phase transitions and message passing algorithms<br>MOHSEN BAYATI, MARC LELARGE AND ANDREA MONTANARI                                 | 753  |
| Arbitrage and duality in nondominated discrete-time models<br>BRUNO BOUCHARD AND MARCEL NUTZ  | 823  |
| Finiteness of entropy for the homogeneous Boltzmann equation with measure initial condition . . . . . NICOLAS FOURNIER  | 860  |
| Gibbs measures on permutations over one-dimensional discrete point sets<br>MAREK BISKUP AND THOMAS RICHTHAMMER  | 898  |
| Large deviations for cluster size distributions in a continuous classical many-body system<br>SABINE JANSEN, WOLFGANG KÖNIG AND BERND METZGER                 | 930  |
| Approximation algorithms for the normalizing constant of Gibbs distributions<br>MARK HUBER  | 974  |
| A decreasing step method for strongly oscillating stochastic models<br>CAMILO ANDRÉS GARCÍA TRILLOS   | 986  |
| Convergence properties of pseudo-marginal Markov chain Monte Carlo algorithms<br>CHRISTOPHE ANDRIEU AND MATTI VIHOLA  | 1030 |