

# THE ANNALS *of* APPLIED PROBABILITY

AN OFFICIAL JOURNAL OF THE  
INSTITUTE OF MATHEMATICAL STATISTICS

## Articles

- Invariant states and rates of convergence for a critical fluid model of  
a processor sharing queue . . . . . AMBER L. PUHA AND RUTH J. WILLIAMS 517
- Diffusion approximation for a processor sharing  
queue in heavy traffic . . . . . H. CHRISTIAN GROMOLL 555
- Moments and tails in monotone-separable  
stochastic networks . . . . . FRANÇOIS BACCELLI AND SERGUEI FOSS 612
- A representation of Gibbs measure for the  
random energy model . . . . . MARIE F. KRATZ AND PIERRE PICCO 651
- Dual formulation of the utility maximization problem:  
The case of nonsmooth utility . . . . . B. BOUCHARD, N. TOUZI AND A. ZEGHAL 678
- Spanning tree size in random binary  
search trees . . . . . ALOIS PANHOLZER AND HELMUT PRODINGER 718
- Perfect sampling using bounding chains . . . . . MARK HUBER 734
- Coalescence in a random background  
N. H. BARTON, A. M. ETHERIDGE AND A. K. STURM 754
- A homing problem for diffusion processes with  
control-dependent variance . . . . . MARIO LEFEBVRE 786
- Convergence rate of linear two-time-scale  
stochastic approximation . . . . . VIJAY R. KONDA AND JOHN N. TSITSIKLIS 796
- On overload in a storage model, with a self-similar and  
infinitely divisible input . . . . . J. M. P. ALBIN AND GENNADY SAMORODNITSKY 820
- Optimal investment with random endowments in incomplete markets  
JULIEN HUGONNIER AND DMITRY KRAMKOV 845
- The asymptotic distributions of the largest entries of  
sample correlation matrices . . . . . TIEFENG JIANG 865
- On the minimal travel time needed to collect  $n$  items on a circle  
NELLY LITVAK AND WILLEM R. VAN ZWET 881
- Exact asymptotics for fluid queues fed by multiple heavy-tailed on-off flows  
BERT ZWART, SEM BORST AND MICHEL MANDJES 903
- Optimal Hoeffding bounds for discrete reversible Markov chains  
CARLOS A. LEÓN AND FRANÇOIS PERRON 958
- The tail of the stationary distribution of a random coefficient AR( $q$ ) model  
CLAUDIA KLÜPPELBERG AND SERGUEI PERGAMENCHTCHIKOV 971
- Large deviations problems for star networks: The min policy  
FRANCK DELCOIGNE AND ARNAUD DE LA FORTELLE 1006
- Hitting probabilities in a Markov additive process with linear movements and upward  
jumps: Applications to risk and queueing processes . . . . . MASAKIYO MIYAZAWA 1029