THE ANNALS of PROBABILITY

AN OFFICIAL JOURNAL OF
THE INSTITUTE OF MATHEMATICAL STATISTICS

Articles

Critical phenomena for Spitzer's reversible hearest particle systems	
David Griffeath and Thomas M. Liggett	881
Spatial growth of a branching process of particles living in \mathbb{R}^d KÖHEI UCHIYAMA A central limit theorem for k-means clustering DAVID CHITERIA AND THOMAS M. ERGETT BYING CHITERIA AND THOMAS M. ERGETT DAVID CHITERIA AND THOMAS M. ERGETT BYING CHITERIA AND THOMAS M. ERGETT DAVID CHITERIA AND THOMAS M. ERGETT DAVID CHITERIA AND THOMAS M. ERGETT DAVID CHITERIA AND THOMAS M. ERGETT TO STATE THOMAS M. ERGETT TO STA	896
A central limit theorem for k-means clustering David Pollard	919
Limit theorems for some random variables associated with urn models l. FLATTO	927
Moments and error rates of two-sided stopping rules ADAM T. MARYINSEK	935
	942
Renewal theory for Markov chains on the real line ROBERT W. KEENER	942
A lower bound of the asymptotic behavior of some Markov processes	
Tzuu-Shuh Chiang	955
Invariance principles for mixing sequences of random variables MAGDA PELIGRAD	968
Berry-Esseen theorems for simple linear rank statistics under the null-	
hypothesis Royald J. M. M. Does	982
hypothesis Ronald J. M. M. Does Limit theorems for estimators based on inverses of spacings of order	
statistics Peter Hall	992
Statistics	002
theorem Peter Hall	1004
theorem Peter Hall The expected ratio of the sum of squares to the square of the sum	1004
D. L. McLeish and G. L. O'Brien	1019
3	
Short Articles	
First bitting time of amplificant boundary by Wissen and a M. I. T. 1992 P.	1029
First hitting time of curvilinear boundary by Wiener process M. I. TAKSAR	1029
Moment and probability bounds with quasi-superadditive structure for the	
maximum partial sum F. A. Móricz, R. J. Serfling and W. F. Stout	1032
Finite Markov chains in stationary random environments Kurt Nawrotzki	1041
On the central limit theorem for stationary mixing random fields E. BOLTHAUSEN	1047
Some characterizations of strong laws for linear functions of order	
statistics David M. Mason	1051
Statistics David M. Mason Strong limiting bounds for maximal uniform spacings Paul Deheuvels	1058
Generalization and application of a result of C. C. Heyde R. MICHEL	1066
A limit theorem on a subcritical Galton-Watson process with immigration	1000
K. N. VENKATARAMAN AND K. NANTHI	1069
A. N. VENKATARAMAN AND A. INANTHI	1009
Some limit theorems on a supercritical simple Galton-Watson process	
K. N. VENKATARAMAN AND K. NANTHI	1075
Some limit theorems on reversed Brownian motion Rong Wu	1079
Martingales with given convex image P. Prinz	1085
Multiplicative decomposition of non-singular matrix valued continuous	
semimartingales RAJEEVA L. KARANDIKAR	1088
Corrections and Notes	
The Natural Median D. Landers and L. Rogge	1092
The Ivatural Median D. Landers and L. Rogge	1092

Vol. 10, No. 4-November 1982