

List of Publications

Roberto H. Schonmann

- (1) J.F.Perez, R.H.Schonmann: On the global character of some local equilibrium conditions - a remark on metastability. *Journal of Statistical Physics* **28**, 479-485 (1982).
- (2) R.H.Schonmann: Metastability for the contact process. *Journal of Statistical Physics* **41**, 445-464 (1985).
- (3) R.H.Schonmann: Central limit theorem for the contact process. *The Annals of Probability* **14**, 1291-1295 (1986).
- (4) R.H.Schonmann, M.E.Vares: The survival of the large dimensional basic contact process. *Probability Theory and Related Fields* **72**, 387-393 (1986).
- (5) R.H.Schonmann: A new proof of the complete convergence theorem for contact processes in several dimensions with large infection parameter. *The Annals of Probability* **15**, 382-387 (1987).
- (6) R.H.Schonmann: Absence of a stationary distribution for the edge process of subcritical oriented percolation in two dimensions. *The Annals of Probability* **15**, 1146-1147 (1987).
- (7) R.H.Schonmann: The asymmetric contact process. *Journal of Statistical Physics* **44**, 505-534 (1986).
- (8) J.L.Lebowitz, R.H.Schonmann: Pseudo free energies and large deviations for non-Gibbsian FKG measures. *Probability Theory and Related Fields* **77**, 49-64 (1988).
- (9) R.Durrett, R.H.Schonmann: Stochastic growth models. in *Percolation Theory and Ergodic Theory of Infinite Particle Systems*. The IMA volumes in mathematics and its applications, vol. 8, H.Kesten, ed. (Springer Verlag, 1987), pp. 85-119.
- (10) R.H.Schonmann: A new look at contact processes in several dimensions. in *Percolation Theory and Ergodic Theory of Infinite Particle Systems*. The IMA volumes in mathematics and its applications, vol. 8, H.Kesten, ed. (Springer Verlag, 1987), pp. 245-250.
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- (13) R.Durrett, R.H.Schonmann: The contact process on a finite set II. *The Annals of Probability* **16**, 1570-1583 (1988).
- (14) R.Durrett, R.H.Schonmann: Large deviations for the contact process and two dimensional percolation. *Probability Theory and Related Fields* **77**, 583-603 (1988).
- (15) R.H.Schonmann: Second order large deviation estimates for ferromagnetic systems in the phase coexistence region. *Communications in Mathematical Physics*

- 112**, 409-422 (1987).
- (16) J.T.Chayes, L.Chayes, R.H.Schonmann: Exponential decay of connectivities in the two dimensional Ising model. *Journal of Statistical Physics* **49**, 433-445 (1987).
 - (17) R.H.Schonmann: Projections of Gibbs measures may be non-Gibbsian. *Communications in Mathematical Physics* **124**, 1-7 (1989).
 - (18) J.T.Chayes, L.Chayes, G.Grimmett, H.Kesten, R.H.Schonmann: The correlation length of the high density phase of Bernoulli percolation. *The Annals of Probability* **17**, 1277-1302 (1989).
 - (19) R.H.Schonmann: Exponential convergence under mixing. *Probability Theory and Related Fields* **81**, 235-238 (1989).
 - (20) R.H.Schonmann: On two correlation inequalities for Potts models. *Journal of Statistical Physics* **52**, 61-67 (1988).
 - (21) R.Durrett, R.H.Schonmann, N.I.Tanaka: The contact process on a finite set III. The critical case. *The Annals of Probability* **17**, 1303-1321 (1989).
 - (22) R.Durrett, R.H.Schonmann, N.I.Tanaka: Correlation lengths for oriented percolation. *Journal of Statistical Physics* **55**, 965-979 (1989).
 - (23) J.Bricmont, H.Kesten, J.L.Lebowitz, R.H.Schonmann: A note on the large dimensional Ising model. *Communications in Mathematical Physics* **122**, 597-607 (1989).
 - (24) H.Kesten, R.H.Schonmann: Behavior in high dimensions of Potts and Heisenberg models. *Reviews in Mathematical Physics* **1**, 147-182 (1990).
 - (25) M.Bramson, R.Durrett, R.H.Schonmann: The contact process in a random environment. *The Annals of Probability* **19**, 960-983 (1991).
 - (26) E.D.Andjel, R.B.Schinazi, R.H.Schonmann: Edge processes of one dimensional stochastic growth models. *Ann. inst. H. Poincaré, Sect B (Probab. and Statist.)* **26**, 489-506 (1990).
 - (27) R.H.Schonmann: On the behavior of some cellular automata related to bootstrap percolation. *The Annals of Probability* **20**, 174-193 (1992).
 - (28) E.J.Neves, R.H.Schonmann: Critical droplets and metastability for a Glauber dynamics at very low temperatures. *Communications in Mathematical Physics* **137** 209-230 (1991).
 - (29) R.H.Schonmann: Critical points of two-dimensional bootstrap percolation like cellular automata. *Journal of Statistical Physics* **58**, 1239-1244 (1990).
 - (30) R.H.Schonmann, N.I.Tanaka: One-dimensional caricature of phase transition. *Journal of Statistical Physics* **61**, 241-252 (1990). Errata published in *Journal of Statistical Physics* **64**, 477 (1991).
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 - (33) R.H.Schonmann: An approach to characterize metastability and critical droplets in stochastic Ising models. *Ann. inst. H. Poincaré, Sect A (Phys. Théor.)* **55** 591-600 (1991).

- (34) P.A.Ferrari, A.Frigessi, R.H.Schonmann: Convergence of some partially parallel Gibbs samplers with annealing. *The Annals of Applied Probability* **3** 137-153 (1993).
- (35) R.H.Schonmann: The pattern of escape from metastability of a stochastic Ising model. *Communications in Mathematical Physics* **147** 231-240 (1992).
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- (37) N.Madras, R.B.Schinazi, R.H.Schonmann: On the critical behavior of the contact process in deterministic inhomogeneous environment. *The Annals of Probability* **22** 1140-1159 (1994).
- (38) R.H.Schonmann: Relaxation times for stochastic Ising models in the limit of vanishing external field at fixed low temperatures. in *Cellular Automata and Cooperative Systems*. NATO ASI Series. Series C: Mathematical and Physical Sciences - Vol.396. N.Boccara, E.Goles, S.Martinez and P.Picco, eds. (Kluwer Academic Publisher, 1993), pp. 543-546.
- (39) R.H.Schonmann: Slow droplet-driven relaxation of stochastic Ising models in the vicinity of the phase coexistence region. *Communications in Mathematical Physics* **161** 1-50 (1994).
- (40) F.Martinelli, E.Olivieri, R.H.Schonmann: For 2-D lattice spin systems weak mixing implies strong mixing. *Communications in Mathematical Physics* **165** 33-47 (1994).
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- (47) T.M.Liggett, R.H.Schonmann, A.Stacey: Domination by product measures. *The Annals of Probability* **25** 71-95 (1997).
- (48) R.H.Schonmann, N. Yoshida: Exponential relaxation of Glauber dynamics with some special boundary conditions. *Communications in Mathematical Physics* **189** 299-309 (1997).
- (49) P.Dehghanpour, R.H.Schonmann: A nucleation-and-growth model. *Probability Theory and Related Fields* **107** 123-135 (1997).

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- (53) R.H.Schonmann, N.I.Tanaka: Lack of monotonicity in ferromagnetic Ising model phase diagrams. *The Annals of Applied Probability* **8** 234-245 (1998).
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- (55) M.Salzano, R.H.Schonmann: A new proof that for the contact process on homogeneous trees local survival implies complete convergence. *The Annals of Probability* **26** 1251-1258 (1998).
- (56) R.H.Schonmann: The triangle condition for contact processes on homogeneous trees. *Journal of Statistical Physics* **90** 1429-1440 (1998).
- (57) D.Ioffe, R.H.Schonmann: Dobrushin-Kotecký-Shlosman theorem up to the critical temperature. *Communications in Mathematical Physics* **199** 117-167 (1998).
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- (74) L. R. Fontes, R.H.Schonmann: Bootstrap percolation on homogeneous trees has two phase transitions. *Journal of Statistical Physics* **132** 839–861 (2008).
- (75) T. Mountford, R.H.Schonmann: The survival of the large dimensional threshold contactc processes. *The Annals of Probability* **37** 1483–1501 (2009).