

## Additions and Corrections for

*Stochastic Interacting Systems: Contact, Voter and Exclusion Processes*

by Thomas M. Liggett

(Thanks go to David Aldous, Paul Jung, George Kordzakhia, Steve Krone, and especially Jeff Steif for their contributions to this list.)

Page 5, lines 1-4 $\uparrow$ . The  $q$ -matrix referred to here follows the usual convention: It is chosen to have negative diagonal entries so that the row sums are zero.

Page 13, line 7 $\uparrow$ . Durrett (1994) should be Durrett (1984).

Page 24, line 11 $\downarrow$ .  $f_1 + f_2 = 1$  should be  $f_1 + f_2 = 2$ .

Page 35, line 15 $\downarrow$ . This display should be

$$\bar{\nu} = (1 - p)\nu + p\delta_\emptyset,$$

Page 39, line 9 $\uparrow$ . “were” should be “where”.

Page 46, line 15 $\downarrow$ . “mininum” should be “minimum”. Also, add: “Jensen’s inequality implies that”

Pages 48-54. Several readers have pointed out that the boxes used in these arguments are not always exactly the ones that should be used. The careful reader will need to invest some time and effort to work out the correct choices. Referring back to the original paper by Bezuidenhout and Grimmett should be helpful in doing this.

Pages 50-55. More care needs to be taken with the dependence of the various  $\epsilon$ ’s and the  $p$  that appear with quantifiers in the statements of Theorem 2.12, Propositions 2.20, 2.22 and Theorem 2.23 when they are used to prove Theorem 2.25(b). In that proof, one needs to find a  $\lambda' < \lambda$  so that the contact process with parameter  $\lambda'$  survives. To do so, one needs a  $p$  sufficiently close to 1 so that statement containing displays (2.24a) and (2.24b) holds. The  $p$  in Theorem 2.23 depends only on the  $\epsilon$  in Proposition 2.22, which depends only on the  $\epsilon$  in Proposition 2.20, which in turn depends only on the  $\epsilon$  appearing in Theorem 2.12.

Page 54, line 10 $\uparrow$ .  $B_{2k} = k$  should be  $k \in B_{2k}$  (twice).

Page 64, line 16 $\downarrow$ . “Nykodym” should be “Nikodym”.

Page 85, Figure 3.  $\rho - (c)$  and  $\rho + (c)$  should be  $\rho_-(c)$  and  $\rho_+(c)$  respectively.

Page 107, lines 6 $\downarrow$  and 8 $\downarrow$ . Omit the statements about the infimum.

Pages 123-125. The proof of Theorem 4.130 follows Lalley (1999). Lalley later found an error in this approach, and explains the nature of the error and what can be proved in

S. P. Lalley, *Correction: Growth profile and invariant measures for the weakly supercritical contact process on a homogeneous tree*, Ann. Probab. **30** (2002), 2108–2112.

Page 135, line 20↓. 4.8(c) should be 4.8(d).

Page 139, line 10↓. “sustems” should be “systems”.

Page 157, line 13↑. Eliminate the word “up”.

Page 205, line 17↓. A reference should be added here:

J. E. Steif, *The threshold voter automaton at a critical point*, Ann. Probab. **22** (1994), 1121–1139.

Page 209, line 11↑. Add (MacDonald, Gibbs and Pipkin (1968)).

Page 213, line 15↑. “bounded harmonic constants” should be “bounded harmonic functions”.

Page 227, line 18↓.  $Z_1$  should be  $Z^1$ .

Page 327, line 28↓. “asymmetirc” should be “asymmetric”.