CORRECTIONS AND ACKNOWLEDGMENT FOR “LOCAL LIMIT THEORY AND LARGE DEVIATIONS FOR SUPERCRITICAL BRANCHING PROCESSES”

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Theorem 1 in [2] is incorrect in the case $\alpha \geq 1$. Our error stems from the fact that the lower bound $C_1$ was determined by an integral expression which we treated as positive, whereas in fact it was zero. This led to an incorrect normalization $A_n$ when $\alpha \geq 1$. This error was communicated to us by K. Fleischmann and V. Wachtel, and the correction, that $A_n = p^n_1 v(\alpha - 1)$ for all $0 < \alpha < \infty$, appears in their paper [1]. We thank them for this communication. The same error carried into Theorem 2, where the inequality (8) holds for all $0 < \alpha < \infty$.

REFERENCES

[1] FLEISCHMANN, K. and WACHTEL, V. (2005). Lower deviation probabilities for supercritical Galton–Watson processes. Preprint. Available at http://arxiv.org/abs/math/0505683.
[2] NEY, P. E. and VIDYASHANKAR, A. N. (2004). Local limit theory and large deviation rates for supercritical branching processes. Ann. Appl. Probab. 14 1135–1166. MR2071418

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