

# Erratum: Three theorems in discrete random geometry

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**Abstract:** An error is identified and corrected in the survey entitled ‘Three theorems in discrete random geometry’, published in *Probability Surveys* **8** (2011) 403–441.

**AMS 2000 subject classifications:** Primary 60K35; secondary 82B43.

Theorem 2.2 asserts (in part) a lower bound for the connective constant  $\mu$  of a vertex-transitive lattice in  $d$  dimensions. The hypothesis of the theorem is too weak to imply the bound, and indeed the bound is violated by the hexagonal lattice. The best lower bound known to the author is that of [1, Thm 1.1], namely

$$\mu \geq \sqrt{\Delta - 1}$$

for an infinite, connected, vertex-transitive,  $\Delta$ -regular, simple graph.

## References

- [1] GRIMMETT, G. R. AND LI, Z., *Bounds on the connective constants of regular graphs*, (2012), <http://arxiv.org/abs/1210.6277>.