Proceedings of the Edinburgh Mathematical Society (2018) **61**, 1101
doi:10.1017/S0013091518000202

CORRIGENDUM

A FROSTMAN-TYPE LEMMA FOR SETS WITH LARGE INTERSECTIONS, AND AN APPLICATION TO DIOPHANTINE APPROXIMATION – CORRIGENDUM

TOMAS PERSSON AND HENRY W. J. REEVE

doi.org/10.1017/S0013091514000066, Published by Cambridge University Press, 27 October 2014

Keywords: diophantine approximation; Hausdorff dimension; classes with large intersections; corrigendum

Simon Baker has brought to my attention an error in the proof of Theorem 1.2 of [**1**]. The theorem states that a set $E_\lambda(\alpha)$ belongs to the class $\mathscr{G}^{1/\alpha}([0,1])$ for almost all $\lambda \in (1/2, 1)$. In the proof it is established that, for any positive integer m, the set $E_\lambda(\alpha)$ belongs to $\mathscr{G}^{1/\alpha}([0,1])$ for almost all $\lambda \in (1/\sqrt[m]{2},\ \sqrt[m]{0.64})$. The mistake is that this sequence of intervals does not cover $(1/2, 1)$, but only $(1/2, 0.64) \cup (\sqrt{2}/2, 1)$. In Theorem 1.2, one should therefore replace 'for almost all $\lambda \in (1/2, 1)$' with 'for almost all $\lambda \in (1/2, 0.64) \cup (\sqrt{2}/2, 1)$'.

Reference

1. T. Persson and H. Reeve, A Frostman-type lemma for sets with large intersections, and an application to Diophantine approximation, *Proc. Edinb. Math. Soc.* **58**(2) (2015), 521–542.

