An introduction to expander graphs

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List of corrections

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Chapter 1

(1) Page 6, line 5: “the image of $\gamma$” (instead of $\eta$).
(2) Page 6, lines 8 and 9: “even if $k$ is deformed” and “distorsion of $k$” (instead of $\gamma$).
(3) Page 8, line 7: actually, there are two “miraculous” values of $t$, namely $t = 0$ and $t = 1$ (with $\beta = 1$ and $\beta = 0$ respectively).

Notation

(1) Page 10: item (13) should come before item (11) (which uses the notation $f \sim g$); in item (12), add that $f = O(g)$ is synonymous with $f \ll g$.

Chapter 2

(1) Page 20, exercice 2.1.19: this should have been placed in Section 2.2, since Question (2) is best solved and understood in terms of the metric on the graph.
(2) Page 41, l. -9: “edges between two points $x, x \cdot s$ for $s \in S$” (thanks to C. Ballantine).

Chapter 6

(1) Page 193, Corollary 6.4.3: after (6.16), instead of “for $n \leq \tau \log(p/2)$”, read “for some $n \asymp \tau \log(p/2)$”; the proof gives this result after inspection, or compare with Corollary 4.6 in reference [70]. (Thanks to E. Fuchs, A. Tran and M. Litman for this correction and the next.)
(2) Page 195, Corollary 6.4.5: after (6.20), instead of “where”, read “for some”; this is what is proved in this case (see page 196).