Erratum to Parameterized Analysis of Reconfigurable Broadcast Networks

A. R. Balasubramanian¹, Lucie Guillou², and Chana Weil-Kennedy³(⊠),

¹ Technical University of Munich bala.ayikudi@tum.de
² ENS Rennes lucie.guillou@ens-rennes.fr

The proof of Theorem 2 published in [1] contains a mistake, kindly pointed out by Nicolas Waldburger.

The exact error is the following: to bound the norm of set \mathcal{M} , a configuration $C \in \mathcal{M}$ is considered where $C(q) \leq v(q) + N', \forall q$ for some N'. A configuration C_N is then defined such that $C_N(q) = \min(C(q), v(q) + N)$ for all q with the N given by Theorem 1. The proof then states that $C_N \in \llbracket \theta \rrbracket_N$, which is only possible if $C_N(q) \geq v(q) + N$ for all q. This is wrong because C(q) may be smaller than v(q) + N on some q, entailing $C_N(q) < v(q) + N$ and $C_N \notin \llbracket \theta \rrbracket_N$.

The results of the original paper up until Theorem 2 remain valid. We are currently working on a solution.

References

 A. R. Balasubramanian, Lucie Guillou, Chana Weil-Kennedy. Parameterized Analysis of Reconfigurable Broadcast Networks In FOSSACS '22, volume 13242 of Lecture Notes in Computer Science, pages 61–80. Springer, 2022. 10.1007/ 978-3-030-99253-8_4.

³ Technical University of Munich chana.weilkennedy@in.tum.de