Correction to

Weak Flip Codes and their Optimality on the Binary Erasure Channel

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In [1, Sec. V.C], we claim that the optimal codes for the BSC for \( M = 3 \) and \( M = 4 \) have been derived in [2] and are weak flip codes of type

\[
\begin{align*}
t_{\text{weak}}^* &= \begin{cases} 
[k + 1, k, k - 1] & \text{if } n \mod 3 = 0 \\
[k + 1, k, k] & \text{if } n \mod 3 = 1 \\
[k + 1, k + 1, k] & \text{if } n \mod 3 = 2.
\end{cases}
\end{align*}
\] (1)

Unfortunately, this is not completely correct. The codes (1) are only proven to be globally optimal for \( M = 3 \). In the case of \( M = 4 \), they are only conjectured to be globally optimal. We do prove, however, that (1) is locally optimal when constructing the codes recursively, and that (1) is optimal among all linear codes.

We apologize for the wrong claim.

References
