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Erratum

Erratum to "Intersecting codes and separating codes" [Discrete Applied Mathematics 128 (2003) 75–83]☆

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The first author's name has been incorrectly given in the published article. The correct name is given above.

Propositions 3 and 4, as well as Corollary 1, should be replaced by the following proposition.

Proposition 1. *Let t be an integer $t \geqslant 2$ and j an integer such that $1 \leqslant j \leqslant t$. Consider a t-wise intersecting, binary, linear code C, and a non-linear subcode $\Gamma \subseteq C$. Define*

$$y(t,j) := \begin{cases} t+1 & \text{when } t \text{ and } j \text{ are odd,} \\ t & \text{when } t \text{ is even,} \\ t-1 & \text{when } t \text{ is odd and } j \text{ even.} \end{cases}$$

Code Γ is $(j, t+1-j)$-separating if and only if any $y(t,j)$ non-zero codewords are linearly independent.

Theorem 1 should be replaced by the following proposition.

Theorem 1. *Given an $[n, nR]$ t-wise intersecting binary code, there is a construction of a non-linear $(j, t+1-j)$ separating code Γ of rate $R(1+o(1))/\lfloor t'/2 \rfloor$, where $t' = t-1$ if t is odd and j is even, and $t' = t+1$ otherwise.*

Both Theorem 1 and Example 2 should be specialized to the case of even j. In Example 3, any four codewords must be independent, resulting in a rate of 0.001851.

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The proofs of the modified results are essentially the same, and they can be found in 'Asymptotic overview on separating codes' by G.D. Cohen and H.G. Schaathun, a technical report of the Department of Informatics at the University of Bergen, see http://www.ii.uib.no/publikasjoner/texrap/index.shtml.