

## Constructing Codes Using Transitive Permutation Groups

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An  $(n, M, d)$  code is a set that contains  $M$  codewords of length  $n$  such that the Hamming distance between any two codewords is at least  $d$ . A long-standing problem in information theory is to construct, for fixed  $n$  and  $d$ , a code where  $M$  is large. We use computer search to construct large codes that are based on transitive permutation groups.

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