Abstract

Symbol-pair codes can be used to guard against pair errors over symbol-pair read channels. One main task in symbol-pair coding theory is to design codes with large minimum pair distance. Maximum distance separable (MDS) symbol-pair codes are optimal in the sense they attain maximal minimum pair distance. In this talk, based on constacyclic codes, we construct some classes of MDS symbol-pair codes with small minimum pair-distance. Compared with classical q-ary MDS codes, the constructed MDS symbol-pair codes have relatively large length.