

## ABSTRACT

The performance of Truncated Costas Optical Orthogonal Codes (TC OOCs) in Fiber Optic CDMA LANs System is investigated. Programs for generating the codes, evaluating the auto-correlation, cross-correlation and calculating BER are designed. TC OOCs on  $GF(p)$  where  $p$  is a prime number for  $7 \leq p \leq 31$  are studied. The obtained results show that TC OOCs generated by 1 generator on  $GF(p)$  are  $(w(2p-3), w, 2, 2)$  codes for chip synchronous systems.

