

Abstract

Orthogonal frequency division multiplexing (OFDM) is one of the key technologies in the research of 5th generation mobile communication technology. Golay sequences play an important role in the OFDM systems. Paraunitary matrices give a systematic construction of Golay sequences. In this talk, we study properties of paraunitary matrices and present two new constructions of paraunitary matrices which induces new Golay sequences. The new Golay sequences contain some previous constructions found by using different methods.