**PAPR REDUCTION IN OFDM SYSTEM USING PHASE SEQUENCE OF RIEMANN MATRIX**

**ABSTRACT:**

Orthogonal Frequency-division multiplexing is an attractive technique for high-bit-rate communication systems. It has been widely used in modern wireless communication because of its high data rate, immunity to delay spread and frequency spectral efficiency and other advantages. Besides these advantages, one of the major drawback of OFDM is the high Peak-to- average-power ratio (PAPR) of the Transmitter's output signal, as it restricts the system performance. Clipping method is the simplest method to reduce the PAPR of the OFDM system but it has some limitations. Here we are using Selective Mapping (SLM) method which provides good performance for reduction of PAPR, where the actual transmit signal is selected from a set of signals to construct the transmitted signal. In this paper SLM method provide better PAPR reduction compared to normal OFDM signal.

Keywords: Orthogonal Frequency-division multiplexing (OFDM), Peak-to-average-power ratio (PAPR), Selective Mapping (SLM), Inverse Fast Fourier Transform (IFFT).