

## **A NEW APPROACH FOR CANCELLATION OF INTERFERENCE FOR MORE THAN TWO USERS**

**SHEETALMULAY & D. E. UPASANI**

Department of Electronics & Telecommunication, SITS, Narhe, University of Pune, Pune, Maharashtra, India

### **ABSTRACT**

There are various interference cancellation techniques that are invented and presented previously. But if we consider the case of more than two users those techniques are not that much efficient. So in this paper we developed a scheme to achieve interference cancellation having a low complexity with any number of users. The main purpose of this paper is to design the precoders using channel information. Due to this it is possible for different users to transmit their signals over orthogonal directions. Then receiver can separate the transmitted signals and decode them independently by using the orthogonality of the transmitted signals. The main purpose of the project is to achieve the minimum bit error rate.

**KEYWORDS:** Precoder, Orthogonal Design, Interference Cancellation, BER