

## **A MIMO LMS ADAPTIVE EQUALIZATION APPROACH IN SIMULATED RADAR EMISSION**

### **Abstract:**

MIMO technology has attracted a lot of attention in the area of wireless communications such as radar applications, in term of increasing the spectral efficiency. This research paper presents the model of simulated radar emission environment for RWR testing using MATLAB. For the first phase of the research, the radar emission environment is modeled by modeling four directions of signals as continuous wave with different amplitude to represent their emission of power. These four directions are a distribution of 360 degrees from the aircraft. These signals are propagated through their own transmission channel, showing that they are coming from four different propagation transmissions. A LMS equalizer has been adopted to equalize and analyze the incoming signal. The main purpose of this research is to find an alternative way of testing the radar warning receiver in an indoor approach rather than taking a costly outdoor testing session from the aircraft