

# **Experimental Evaluation of an Indoor MIMO-OFDM System at 60 GHz based on the IEEE802.15.3c standard**

## **Author(s) - Institution(s):**

M. Martínez-Ingles, UPCT  
C. Sanchis-Borras, UPCT  
J. Molina-García-Pardo, UPCT  
J. Rodríguez, UPCT  
Leandro Juan Llácer, UPCT

**Corresponding author email:** : josemaria.molina@upct.es

**Corresponding WG group:** TWG, WG1

## **Abstract:**

This paper presents an experimental study of an indoor environment regarding the performance of a MIMO-OFDM millimeter-wave system based on the standard 802.15.3c. Channel matrices are measured with a Vector Network Analyzer, and in a first step the intrinsic propagation characteristics are analyzed such as the path loss, capacity and correlation. In a second step the performance is studied using different space-time coding strategies. Finally, all this analysis is conducted with respect to different configurations of the MIMO antenna elements.