



PERFORMANCES OF TURBO SAGE BASED EQUALIZER FOR MULTIUSER MULTICARRIER SPACE TIME BLOCK CODED SYSTEM (WedPmPO1)

* Author(s) :

Guillaume Ferré	(GESTE/ENSIL, France)
Mohamad Jamalulli Syed	(GESTE/ENSIL, France)
Vahid Meghdadi	(GESTE/ENSIL, France)
Cances Jean Pierre	(GESTE/ENSIL, France)
Jean Michel Dumas	(GESTE/ENSIL, France)

* Abstract :

In this paper, we propose a multi-user detector for space time uplink transmission in multi-carrier CDMA systems. We propose a new combination using STBC, OFDM and CDMA spreading. Furthermore we propose a turbo equalization scheme based on the use of LDPC for channel coding and SAGE algorithm for channel estimation at the LDPC decoder input. Simulation results show that our proposed receiver has comparable performances to EM and MMSE techniques.