Mário Marques da Silva, Américo Correia, Rui Dinis, "A Decorrelating MUD approach for the Downlink of UMTS Considering a RAKE in the Receiver" – PIMRC 2005, Berlin, Germany, September 2005;

Abstract: The proposed decorrelating multi-user detector (MUD) scheme allows the cancellation of both multiple access interference (MAI) and interpath interference (IPI). The current approach considers the downlink environment of universal mobile telecommunication systems (UMTS), with a RAKE receiver in the mobile station (MS). A comparison is made with a subtractive interference cancellation MUD. Moreover, to improve the performance, we consider a combination of the decorrelating MUD with the subtractive interference cancellation MUD.