"OPPORTUNISTIC USE OF CHANNEL STATE INFORMATION IN MULTIUSER COMMUNICATIONS"

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15/10/2012, SUPELEC, Gif-sur-Yvette

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Résumé :

In this manuscript, we show how available channel state information (CSI) can be exploited opportunistically for modern multi-user communication systems. We first review a class of spatial precoding techniques based on instantaneous CSI and show its performance limits. Then, we present a novel class of space time (multi-domain) interference alignment which no longer builds on instantaneous CSI.