

On RF Impairments in MIMO, interference alignment (IA) and coordinated multipoint (CoMP)

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Abstract:

We will first present some testbed results which shows the significant impact of RF impairments (such as caused by e.g. non-linear amplifiers and phase-noise) on the performance of MIMO and it's more advanced forms interference alignment and coordinated multipoint. Next we will present some of our recent results on modeling such impairments and some theoretical results related to the (Shannon) capacity of MIMO channels with RF impairments.