

Antenna Based SDMA Schemes for Wireless Communications

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Abstract: Presented are a number of Smart Antenna schemes for wireless communications. The relative merits of the overall concept and each system configuration are discussed. Additionally, two new techniques are proposed; one for low cost implementation and the other for ultra high spectral efficiency. We conclude that the best solution depends mainly on user density but it is likely that full up digital beam forming systems will prevail as faster DSP chips become available.