



AN EXEMPLARY COMPARISON OF PER ANTENNA RATE CONTROL BASED MIMO-HSDPA RECEIVERS (ThuAmOR10)

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★ Abstract :

High-Speed Downlink Packet Access (HSDPA) using Multiple-Input Multiple-Output (MIMO) techniques received increasing attention recently, because MIMO-HSDPA allows capacity enlargement and, therefore, supports the demand of high data services, which are expected to become the dominant source of 3G traffic and of revenue in cellular communications in the next few years. This contribution will discuss one particular MIMO-HSDPA scheme -- the Per Antenna Rate Control (PARC) -- from the viewpoint of conventional receiver architectures. In addition, the Signal-to-Interference-Ratio (SIR) is introduced as a basic metric for the channel quality indication required in a PARC-based system, by briefly reviewing blind and data-aided SIR estimation methods.