

Method and apparatus for reducing interference in a wireless communication system when the source of interference is a deterministic component of the system. In one embodiment, the receiver weights the transmitters according to when the source of interference is transmitted. Further, the transmitter may employ power boosting to overcome the source of interference. In one embodiment, a W-CDMA system transmits a sync channel concurrently with physical channels, wherein the sync channel is not orthogonal to the physical channels. The receiver may cancel the sync channel when receiving control or data information. Similarly, the receiver may weight the transmissions from multiple transmitters.