

Wireless LAN - Quo Vadis?

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Wireless LAN has come a long way since its inception in the early nineties. After a decade of proprietary products, wireless LAN suddenly became a mass market with the adoption of the 802.11b standard and the formation of WiFi. Since then there has been a continuous stream of innovations in products and standards. The main emphasis thus far has been on peak throughput for a single link, leading to the use of higher bandwidth, higher constellation size, and MIMO. As the available spectrum fills up though, the emphasis will gradually shift towards a high overall capacity. This means the focus will be less on larger bandwidth or constellation size and more on using more antennas with MIMO or Multi-User MIMO. In addition to addressing all these issues, this talk will show some MIMO propagation characteristics of typical indoor wireless channels and try to predict where WiFi is going.