

WLAN Physical Layer



Ashutosh Gore
Principal Engineer/Manager,
Qualcomm

Abstract: This talk gives an introduction to physical layer of wireless local area networks (WLAN PHY). It first covers OFDM, MIMO, channel models, evolution of 802.11 standards and PHY packet format. The main part of this talk mid-dives into OFDM packet detection, transmit beamforming and automatic gain control. We also briefly mention the applications of these techniques in 802.11be (7th generation WiFi).

Bio: Ashutosh Deepak Gore obtained his B.Tech. and Ph.D. degrees from IIT Bombay, and M.S. degree from University of Hawaii, all in Electrical Engineering. He worked in Nortel Networks, USA from 2000 to 2002. From 2008 onwards, he has worked in various semiconductor companies in India, viz. Marvell, Broadcom, Samsung R&D and Qualcomm, where he is currently Principal Engineer/Manager. His work in Qualcomm focusses on PHYSical layer algorithms and functional reference models for next generation (IEEE 802.11be compliant) wireless local area networks. He joined Qualcomm in May 2016 and seeded the WLAN PHY modeling group in Qualcomm Bangalore. His team developed several key PHY blocks in multiple generations of WLAN access point & client chipsets. He has 10 US granted patents and 14 approved for filing. He has published 3 IEEE journal papers and 8 conference papers.

Date: 17th May 2022, Tuesday

Time: 04:00 PM

Venue: <https://meet.google.com/qdb-shhg-aus>

