
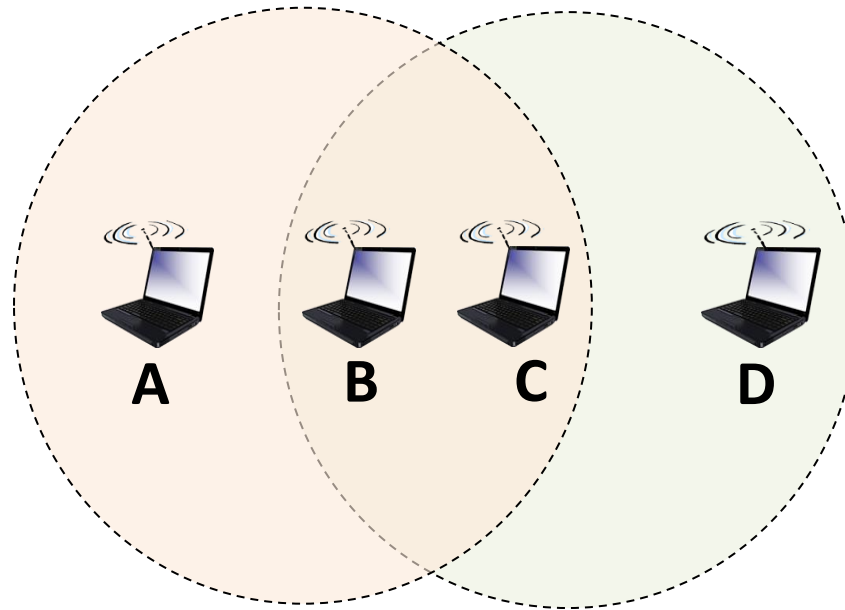


# Computer Networks (SWE3022-41)



**Group  
Activity #3  
(2025/09/24)**

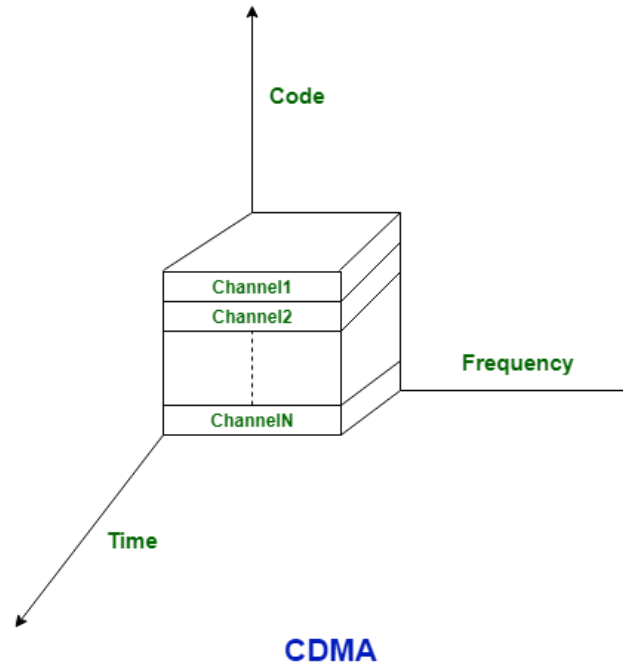
# 1 Wireless Networks Problems



- A. Explain the exposed terminal problem and hidden terminal problem and solutions for each problem.
- B. Explain the differences among the following types of wireless channel impairments:
  - Pathloss
  - Multipath propagation
  - Interference from other sources

## 2

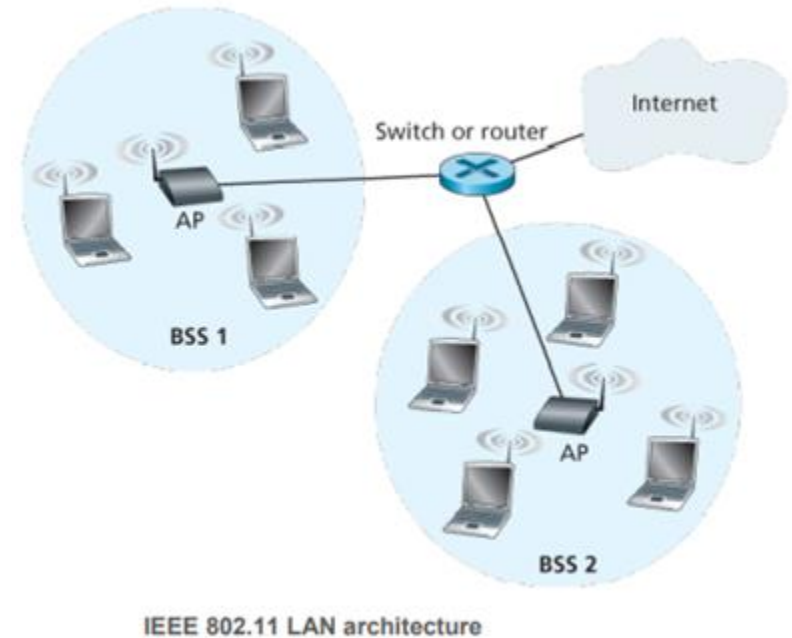
# CDMA



- A. Explain what CDMA is.
- B. Explain the advantages and disadvantages of CDMA.
- C. What is difference between “A simple CDMA (one sender, one receiver)” and “Two sender CDMA”

# 3

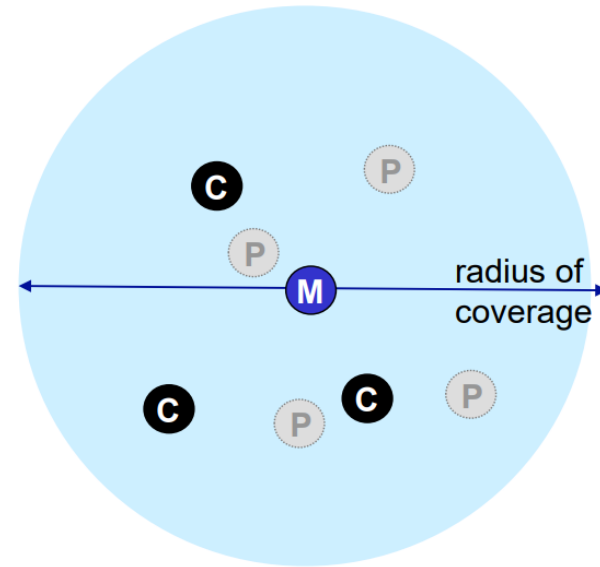
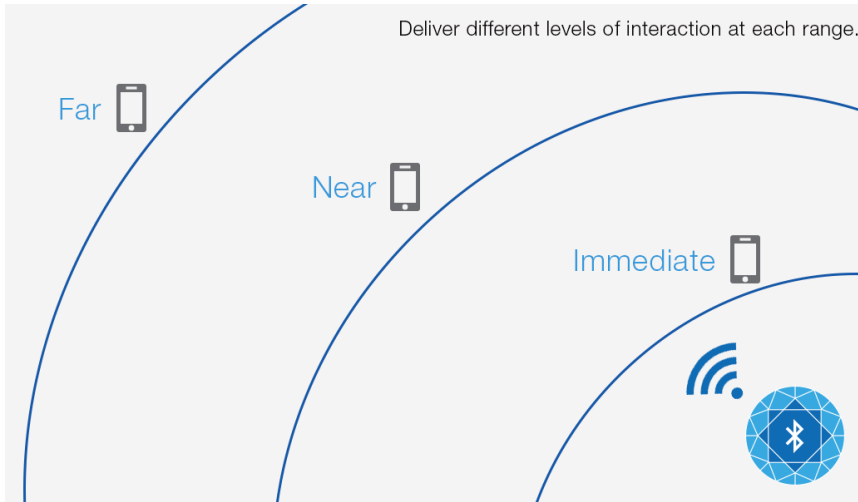
## IEEE 802.11



**There are several 802.11 standards for wireless LAN technology in the IEEE 802.11 (“WiFi”) family.**

- A. Explain the differences of 802.11a, 802.11b, 802.11g, and 802.11n regarding the frequency range and data rate.
- B. What is the usage of 802.11i?
- C. Describe the CSMA/CA Protocol procedure for IEEE 802.11.

## 4 Personal Area Networks (PAN): Bluetooth



- A. Explain what Bluetooth is.
- B. Explain the master device, client device and parked device.
- C. Explain the characteristics of Bluetooth:
  - Parked mode
  - Bootstrapping