



# S-MAC

## ✦ S-MAC: a variation of CSMA-CA

- *Avoid idle listening*
  - ◆ Introduce a duty cycle
    - ▶ Listen and sleep
  - ◆ If there is no communication (no RTS), sleep rather than idle listening
- *Avoid overhearing*
  - ◆ Listen for RTS, if it is destined for another node, sleep rather than overhearing
- *Synchronous wakeup*
  - ◆ All nodes listen at the same time for sender and receiver synchronization
- *Clock synchronization*
  - ◆ SYNC period
  - ◆ To avoid clock skew, nodes often broadcast their next wakeup time to their neighbors

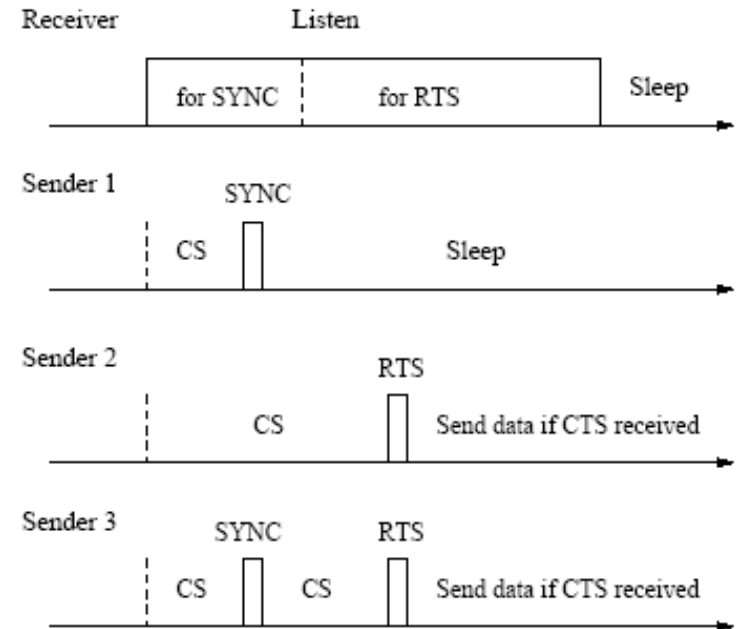


Fig. 3. Timing relationship between a receiver and different senders. CS stands for carrier sense.