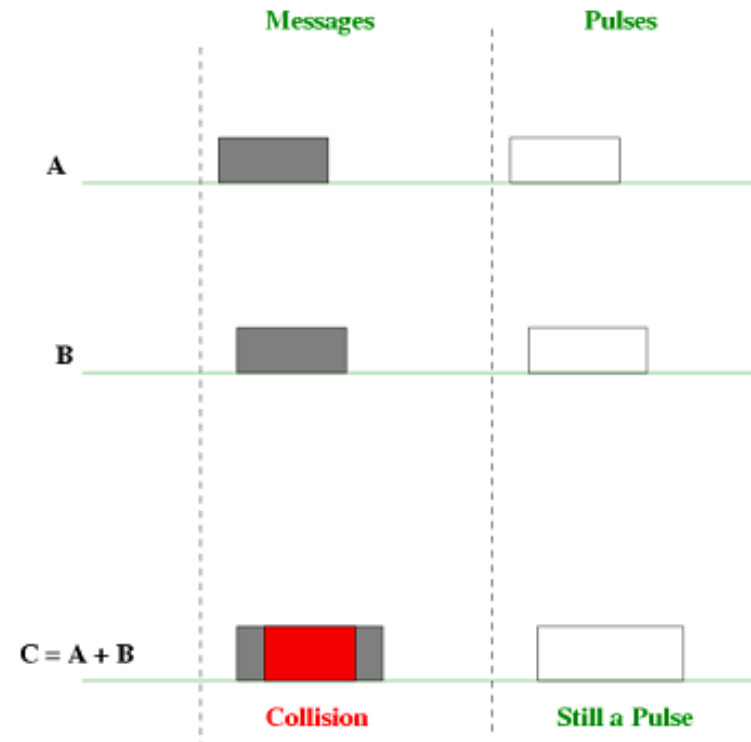
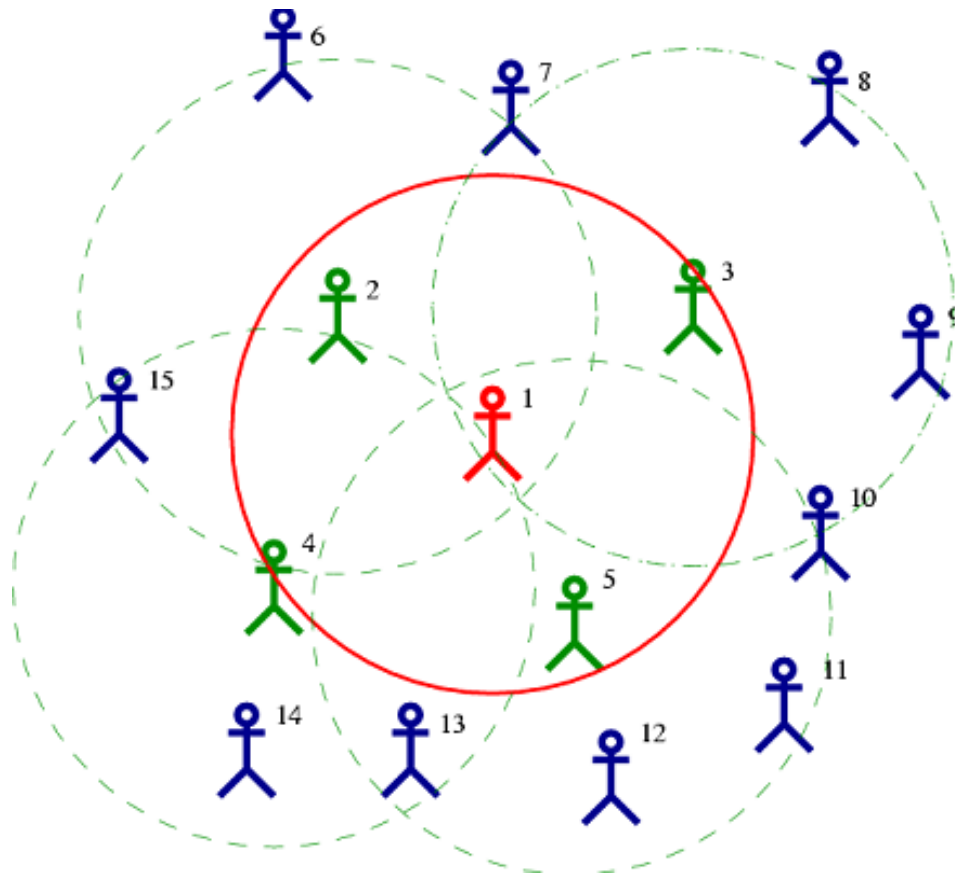
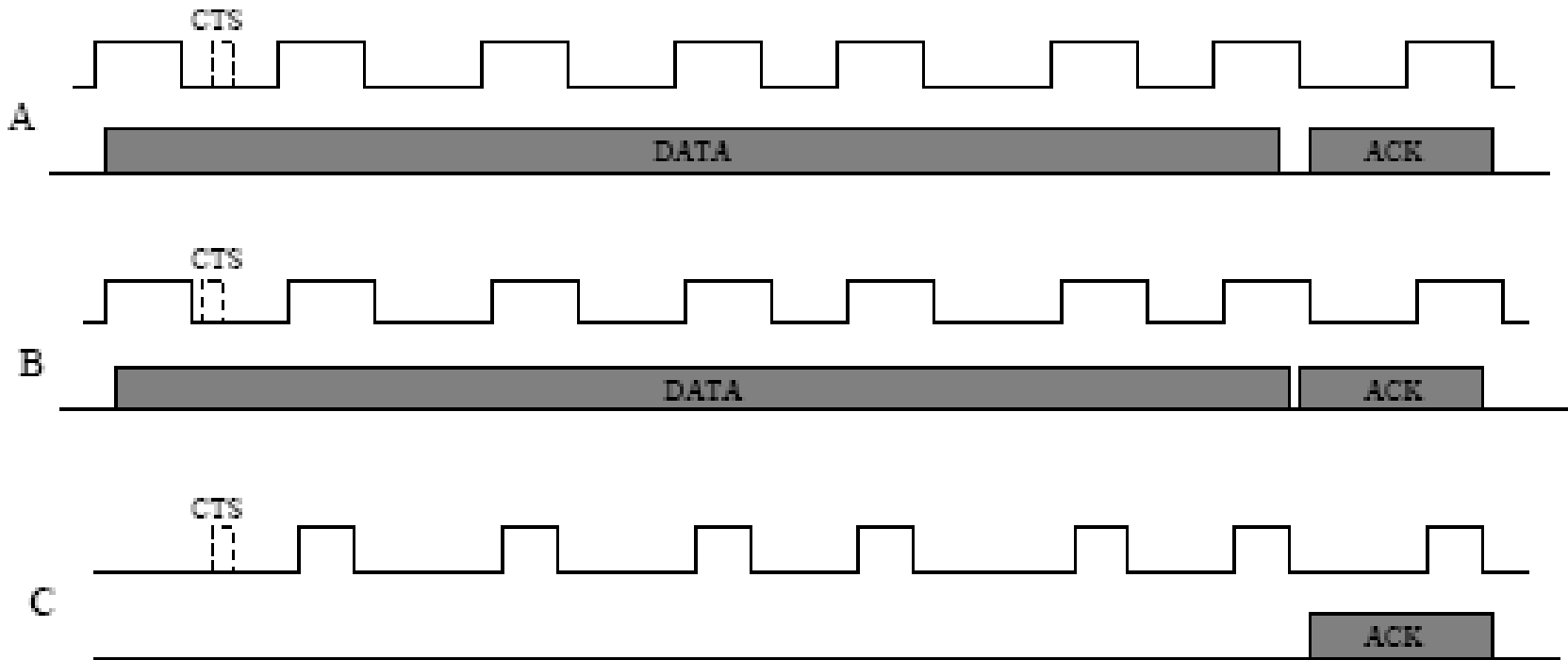


Messages vs. Pulses

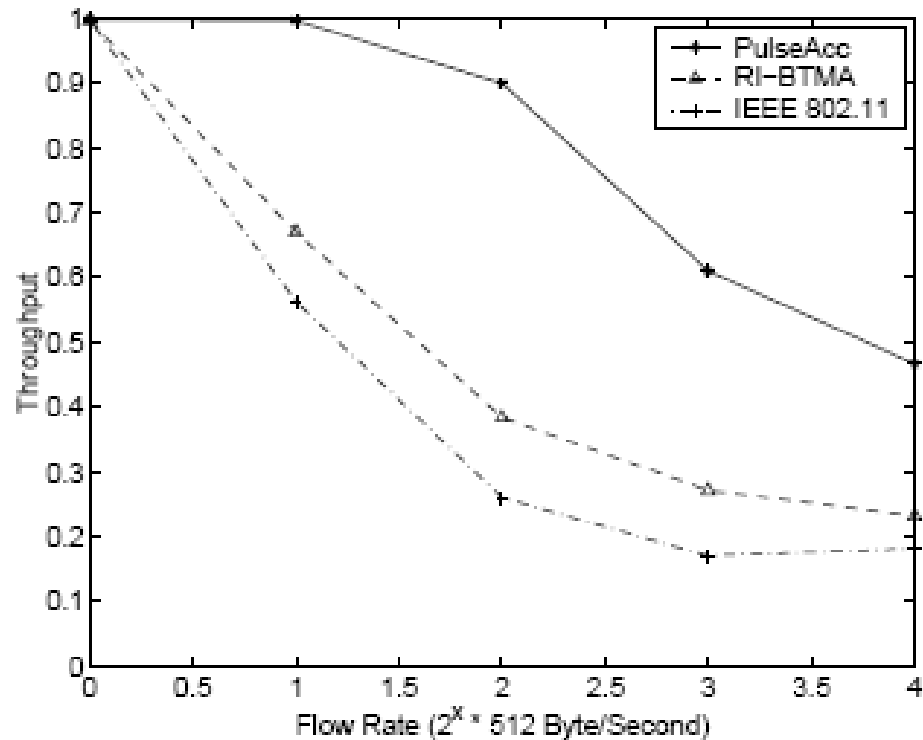


Hidden Terminal Revealed



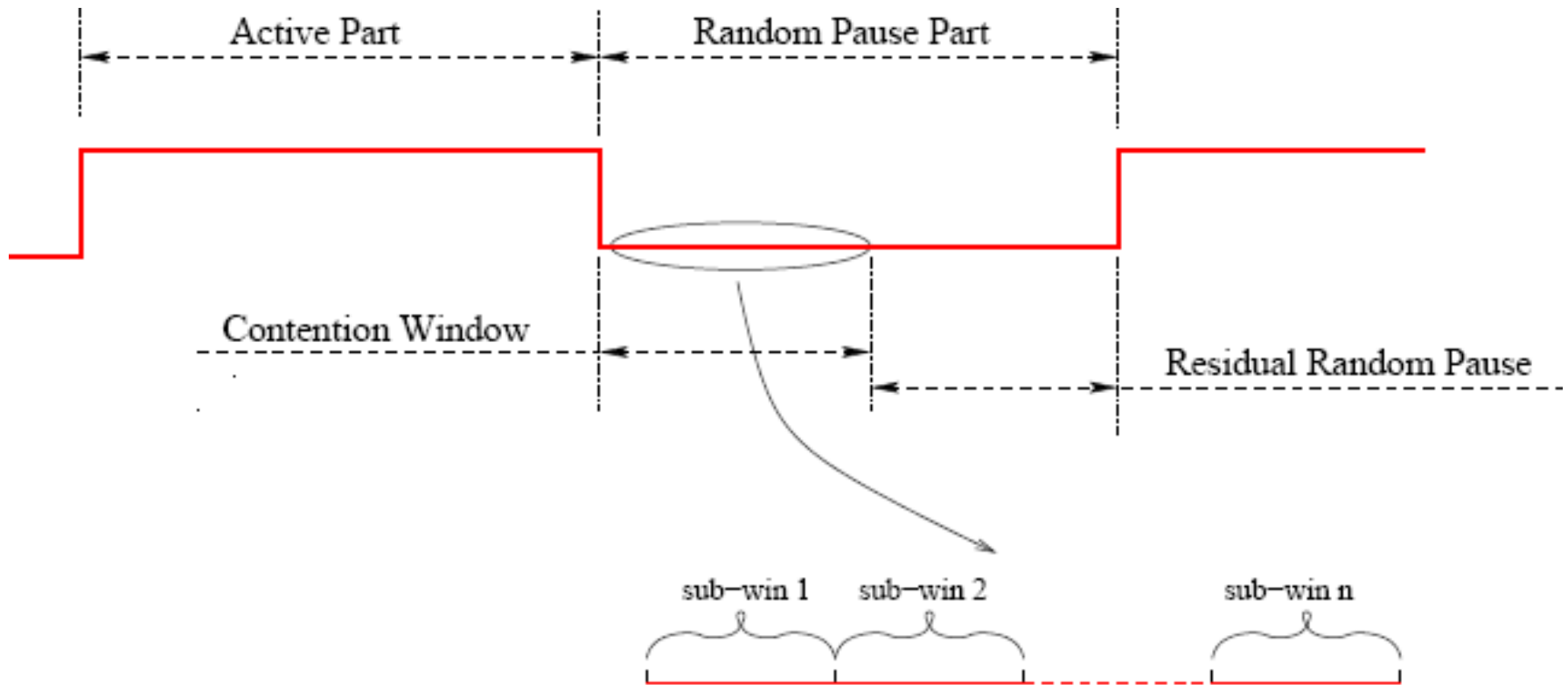
- Hidden terminal *no longer hidden!*
- Collision detection

Throughput Increased

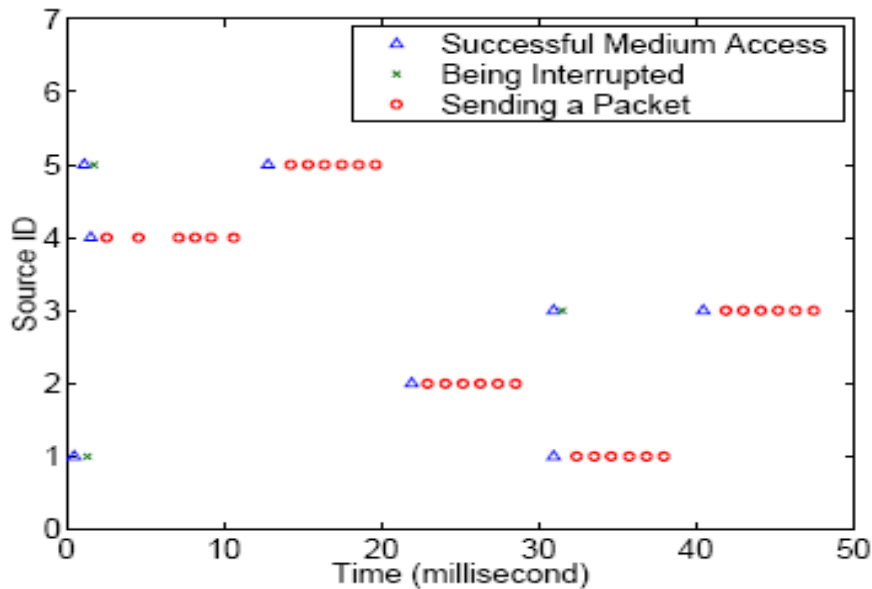


J. Peng, L. Cheng, and B. Sikdar, A Wireless MAC Protocol with Collision Detection, *IEEE Transactions on Mobile Computing*, Vol. 6, No. 12, pp. 1357-1369, 2007.

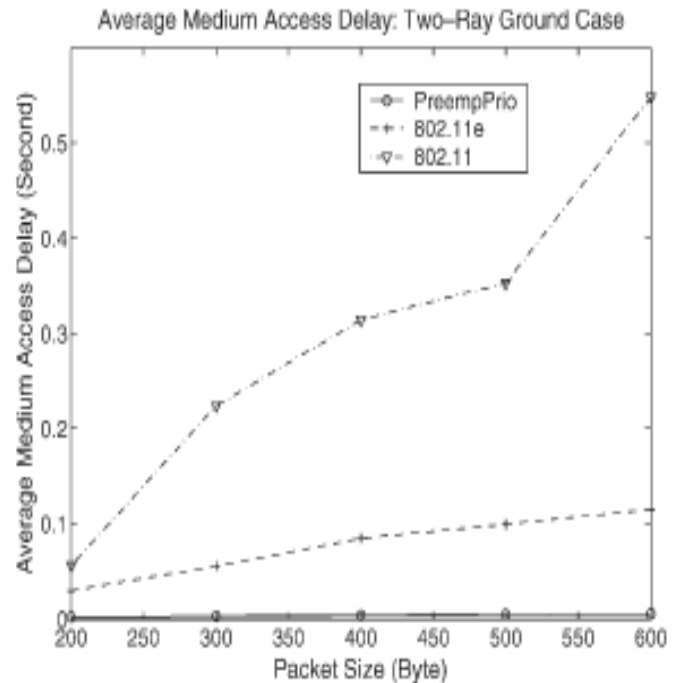
New Pulse Structure for Preemptive Priorities



Preemptive Priority-enabled MAC



S4 for trigger messages > S5 for time-sync controls > others for sensor data packets



J. Peng and L. Cheng, A distributed MAC scheme for emergency message dissemination in vehicular ad hoc networks, *IEEE Transactions on Vehicular Technology*, Vol. 56, Issue 6, pp. 3300-3308, 2007