

## **Dynamics of P-N Junctions**

**Objective:** Discussion of approximations in dynamic modeling

**Outline:**

1. Limitations of abrupt junction approximation
2. Electrostatics of capacitance
3. Depletion capacitance in abrupt junction
4. Depletion capacitance in graded junction
5. Diffusion capacitance

Reading: 5.4

Homework: 4.19, 4.33, 4.34, 4.36, 4.37

**Due: October 25, Tuesday**

**Note: there will be no class meeting on Oct. 25 (homework due day).**

**Please put your homework into my mailbox or deliver it to Mr. Curt Booth in the main office (ECE230) by 10 AM on Oct. 25. The solutions will be posted after the collection.**

**The graded homework will be available on Wednesday, Oct. 26 in the office of Mrs. C. Mainvielle (ECE524P).**

**There will be no class meeting on Oct. 20, Thursday.**