

## E151 Lecture 19 Handout

What amplifiers comprise a cascode?

What is the  $R_{in}$ ,  $R_{out}$  and  $A_v$  of a cascode?

Why does a cascode have a larger bandwidth than a common emitter with similar  $I_B$  &  $RC$ ?

What is the transfer function of an emitter follower? What part of it confounds bandwidth estimation techniques?

What's a surprising fact about EF output impedance?

Under what conditions does the EF present a negative real input impedance?

What dominates the dynamics of a current mirror? Do we want mirrors fast or slow?

Draw a dynamic model for a common base amplifier.

A Review:

What are the physical mechanisms for MOSFET capacitance?

A Puzzle for Your Free Time:

Why does it take an especially long time to get a BJT out of saturation?