# Analog Electronic Circuits

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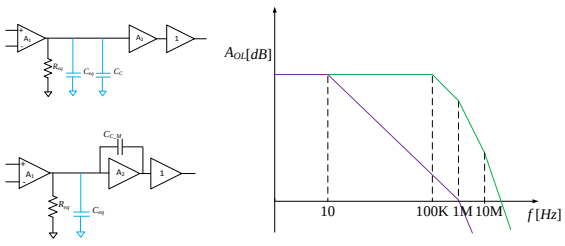
## Lesson #5 Outline

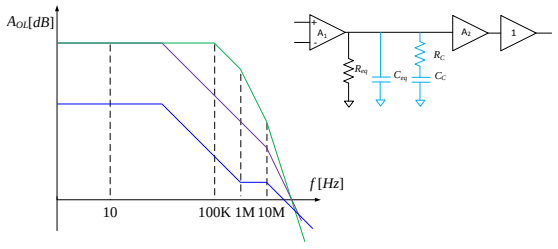
- Internal Compensation
  - Dominant pole
  - Pole-zero cancellation
  - Feedforward
- External Compensation
  - Differentiator circuit
  - Input network
- Simulation models
  - Behavioral
  - Hybrid: Transistor + Behavioral
- Loopgain evaluation in simulation



## Dominant pole compensation

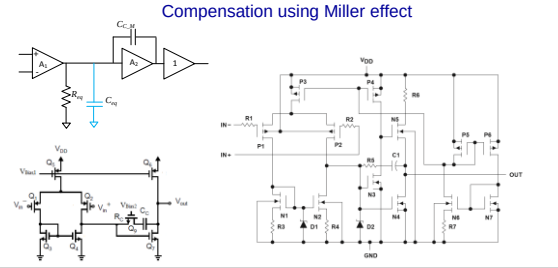


## Pole-zero cancelation



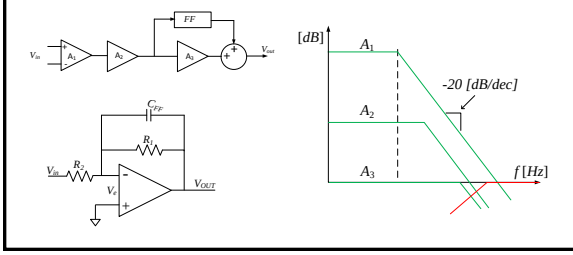



## Compensation using Miller effect

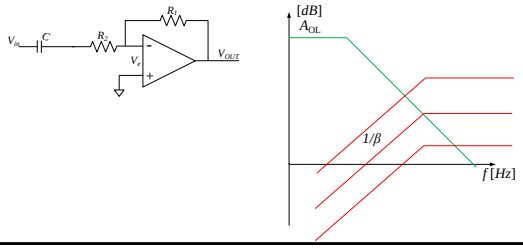





## Feedforward compensation

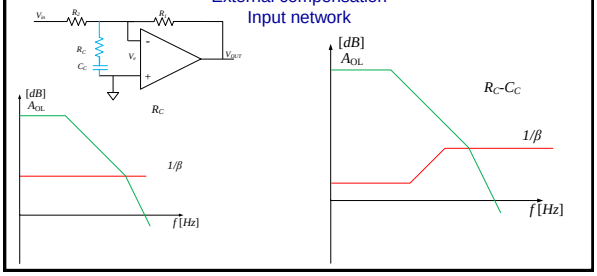


## External compensation
## Differentiator






## External compensation
## Input network






## Simulation Models
## Behavioral

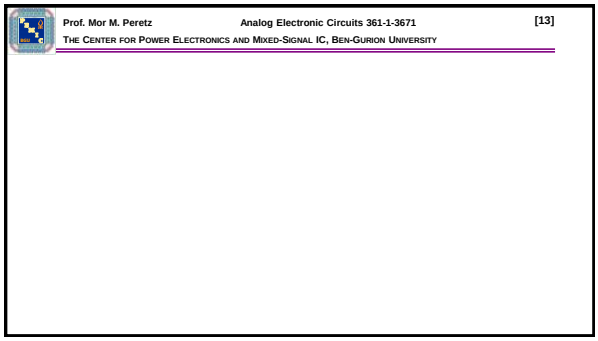
## Simulation Models
## Hybrid: Transistor + Behavioral



## Spice modeling



## Loopgain evaluation in the simulation platform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