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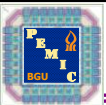
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## Lesson #5 Outline

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



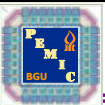
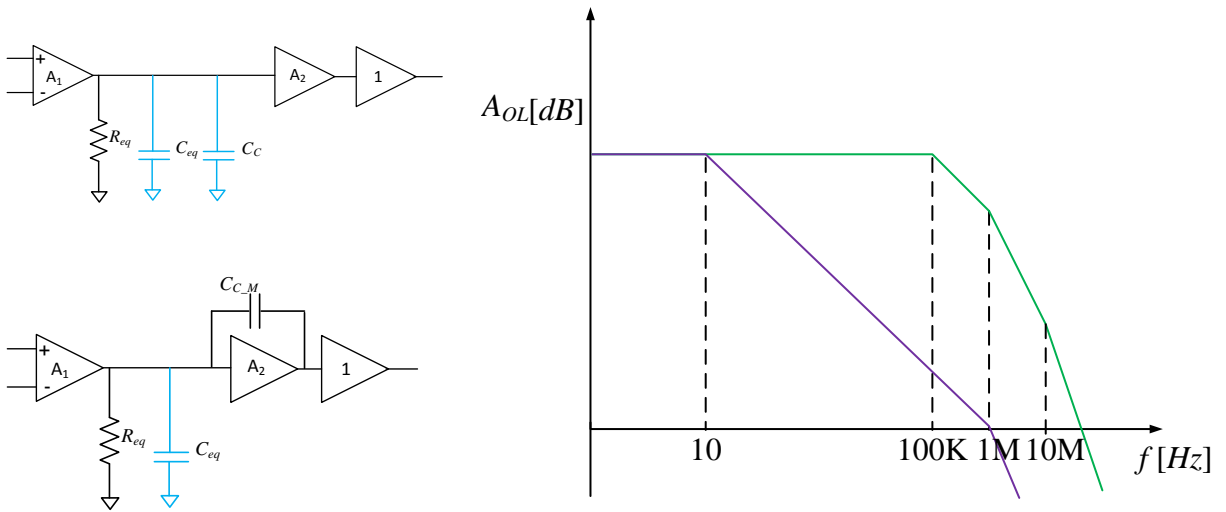
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## Dominant pole compensation



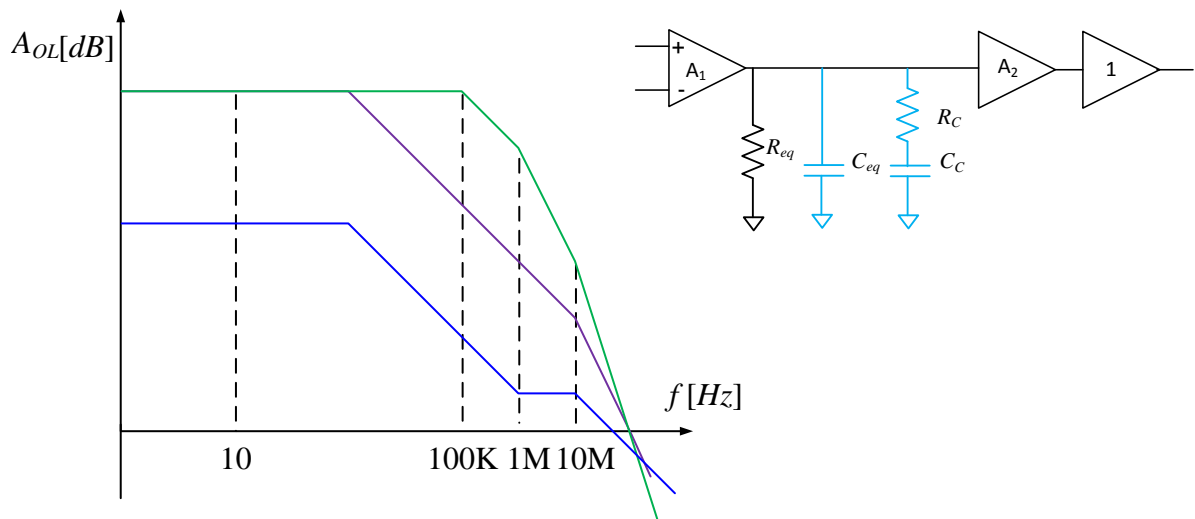
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## Pole-zero cancellation





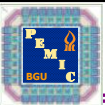
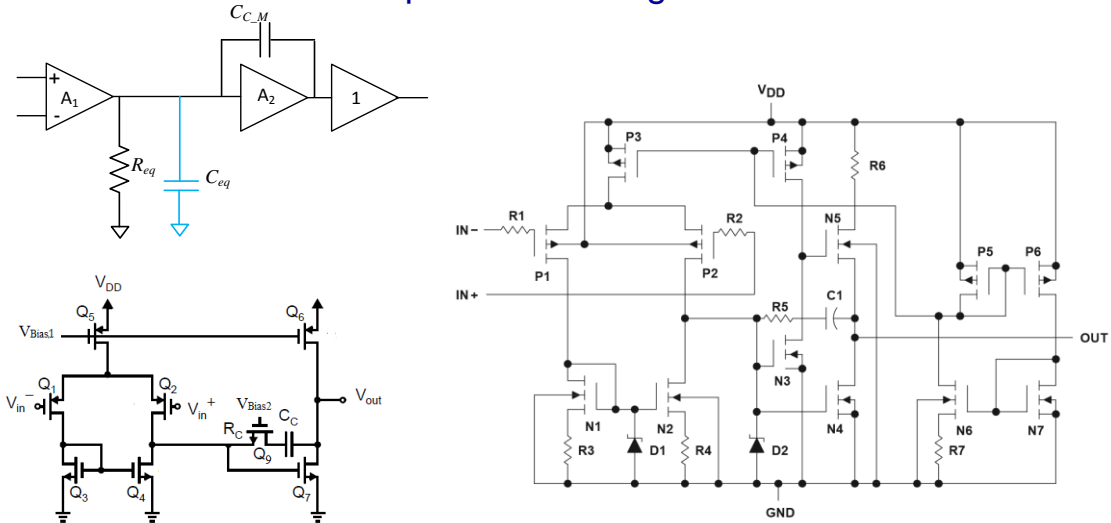
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## Compensation using Miller effect



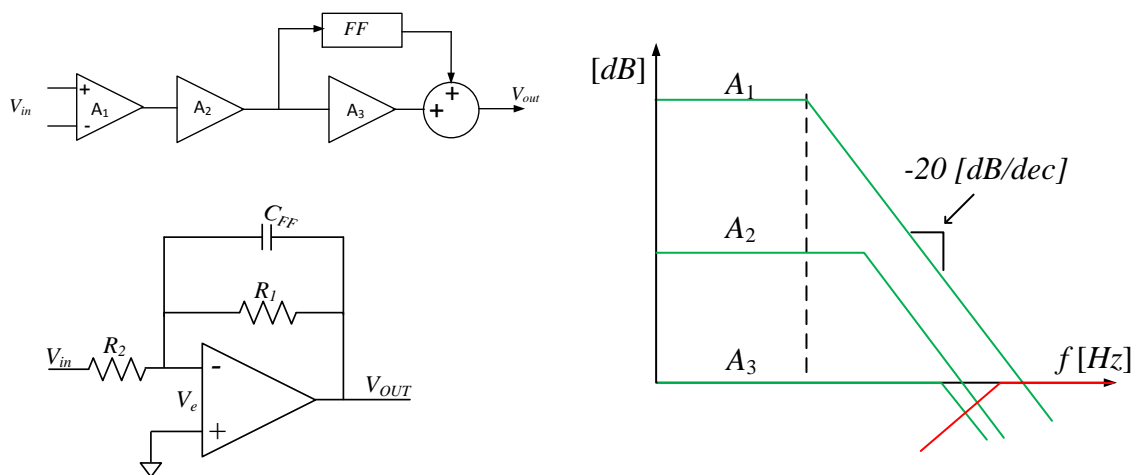
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## Feedforward compensation





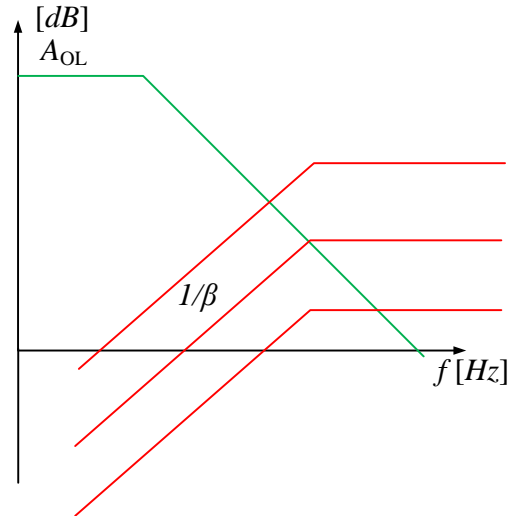
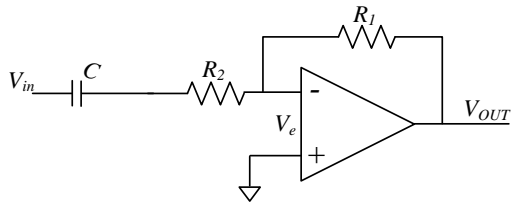
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## External compensation Differentiator



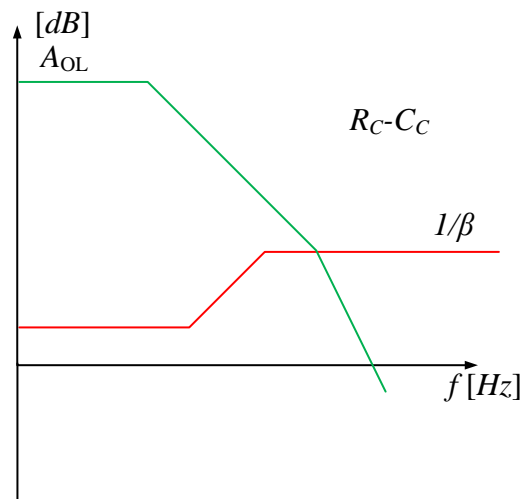
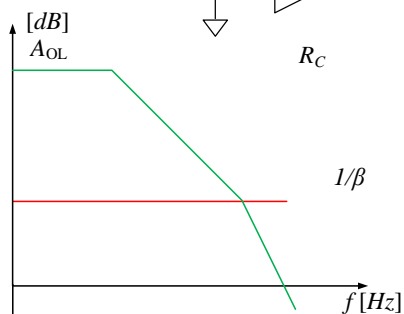
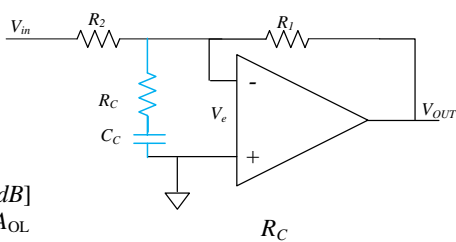
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## External compensation Input network





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## Simulation Models Behavioral



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## Simulation Models Hybrid: Transistor + Behavioral



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## Spice modeling



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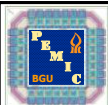
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## Loopgain evaluation in the simulation platform



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