



MEEG 311 – Lecture 22

Vibration and Control

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Goals:

- Basic rules for sketching the root locus (see handout):
 - Open-loop (or loop gain) poles and zeros
 - Segments of real axis that are parts of the root locus
 - Asymptotes (behavior at infinity)
 - Breakaway and break-in points on the real axis
 - Angles of departure from complex poles and arrival to complex zeros
- Example of sketching a root locus (see handout)
- Critical gain computation from the root locus for conditionally stable systems (gain value at which the closed loop poles cross the imaginary axis)