



MEEG 311 – Lecture 10

Vibration and Control

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Goals:

- Orthogonal pulses and impulses:
 - Impulses as suitable limits of orthogonal pulses
 - Approximating (piecewise continuous) time functions with trails of impulses
- Fundamental system properties:
 - Linearity (superposition)
 - Causality (non-anticipatory system response)
 - Time invariance
- Impulse response: For causal linear time invariant systems, the impulse response (which is a function of time) is the inverse Laplace transformation of the transfer function. Conversely, for such systems the transfer function is equal to the Laplace transformation of the impulse response