



Course of
"Automatic Control Systems"
2022/23

Project

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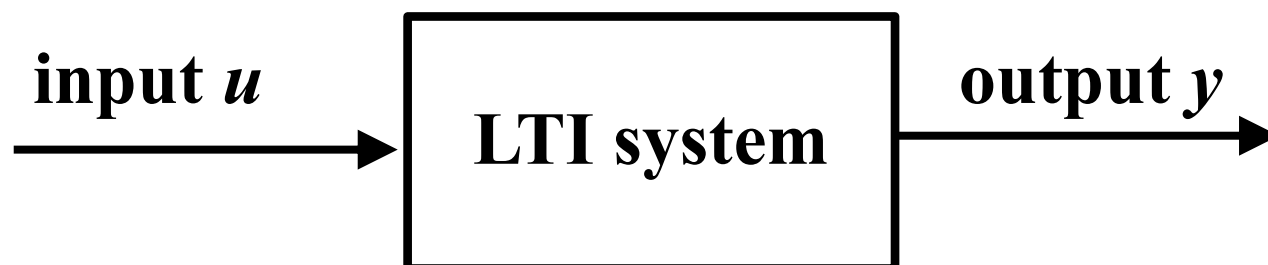
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Team code: **uxbsz19**

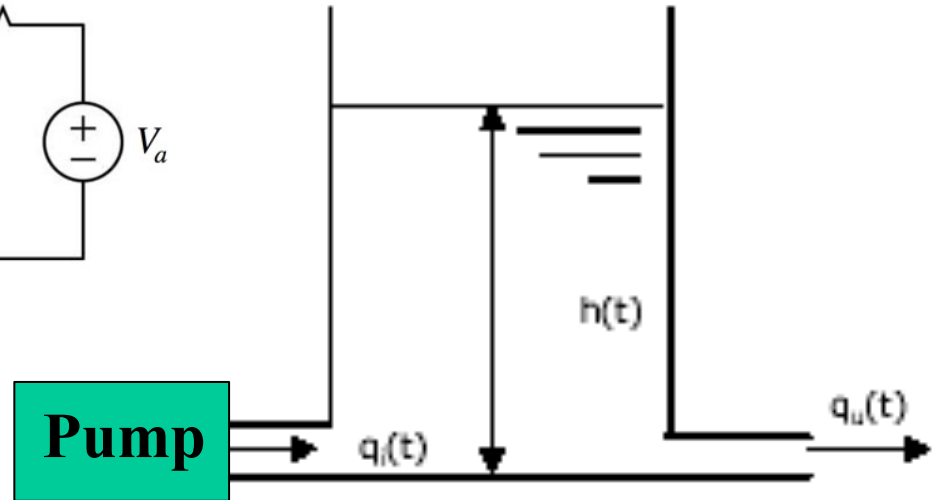
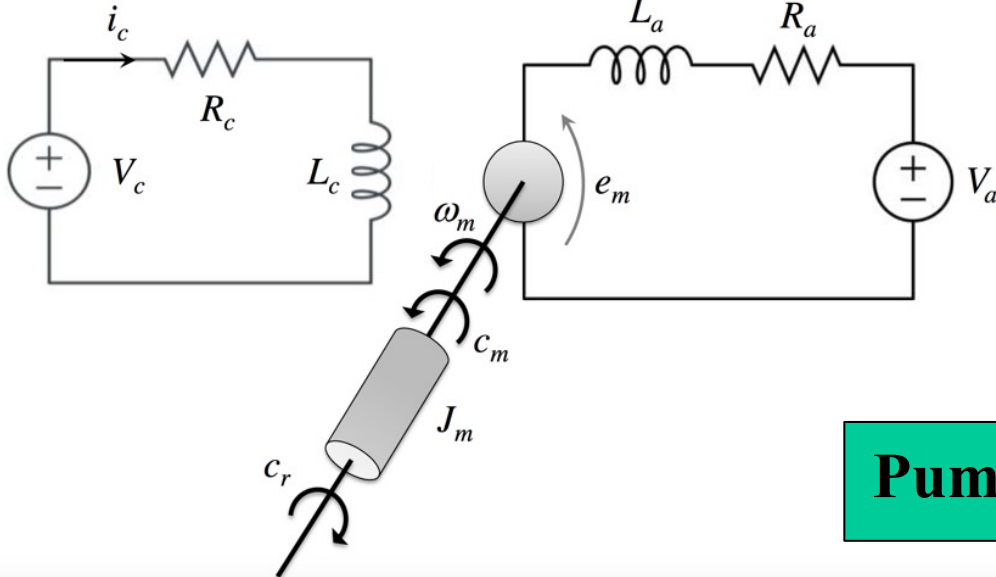
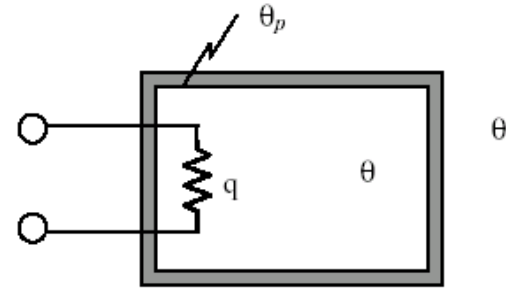
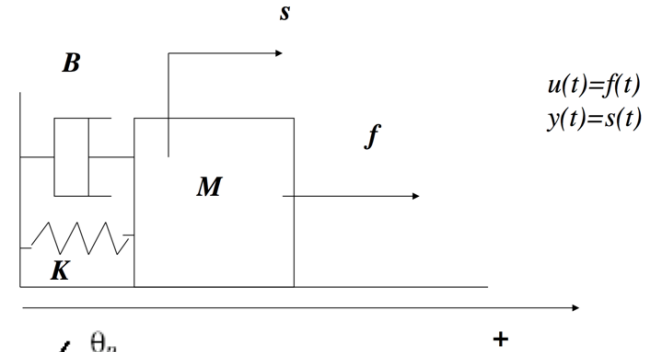
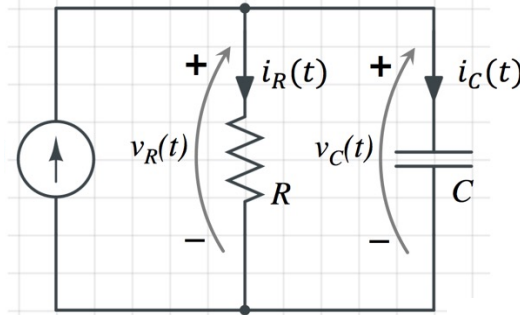
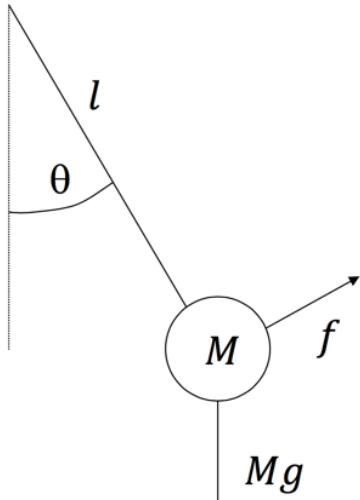


Analysis of LTI system in the time and frequency domains



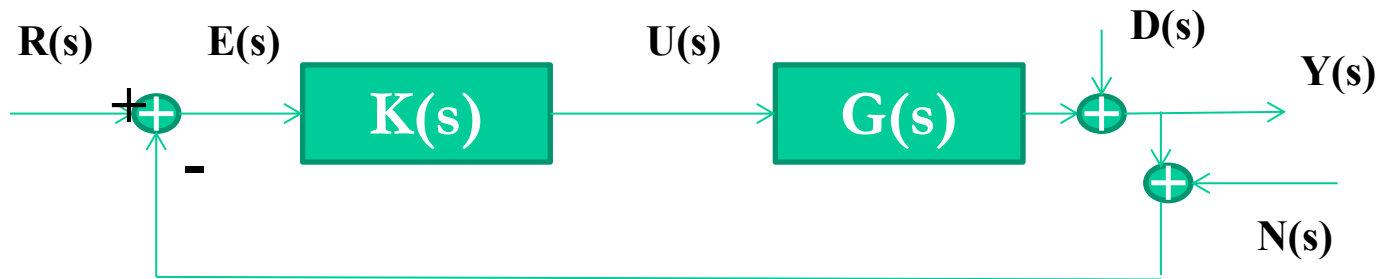
- ✦ *Input output representation*
- ✦ *State space representation*
- ✦ *Transfer function*
- ✦ *Stability analysis*
- ✦ *Free evolution*
- ✦ *Force response (to step, sinusoidal, ramp signals, etc.)*
- ✦ *Frequency response (system as a filter)*

Examples of dynamical systems





Controller design



✦ *Stability*

✦ *Robust stability*

✦ *Steady-state performances*

✦ *Transient performances*