

Teleoperation of a surgical robot using force feedback

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Gruppe 633

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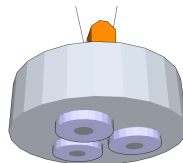
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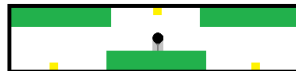
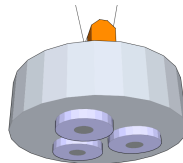
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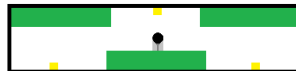
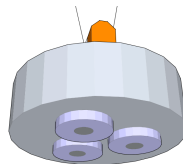
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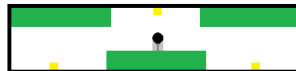
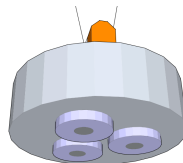
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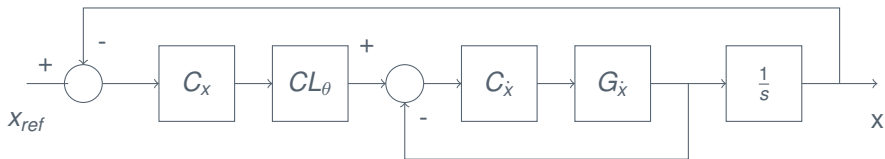
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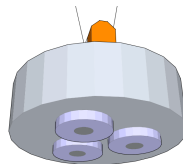
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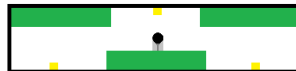
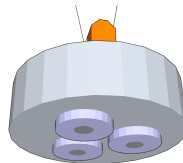
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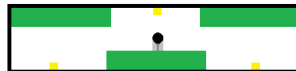
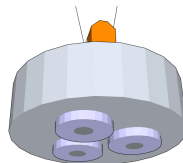
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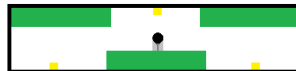
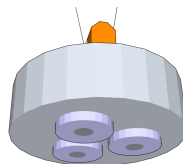
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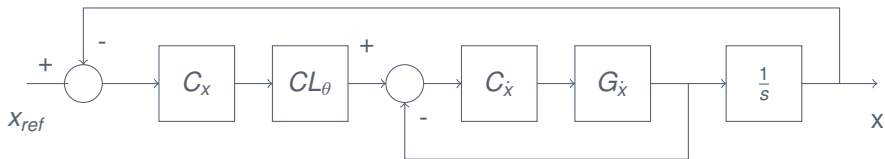
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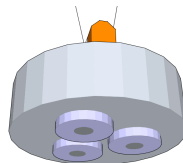
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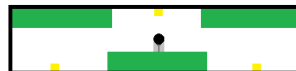
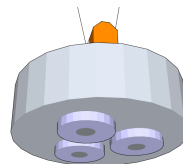
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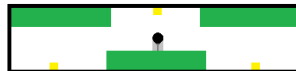
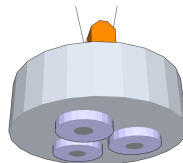
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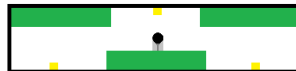
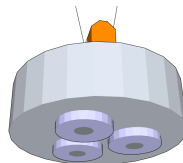
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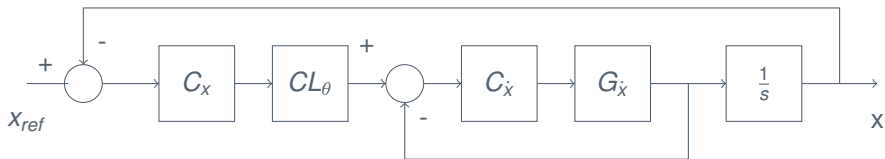
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- Model approach
- Nonlinearities
 - Hammerstein Wiener Models



Figure: Hammerstein-Wiener model.

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► Linear model

- Effort
- Force

Include picture with effort force fit here!!

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► Nonlinearities

- Deadzone nonlinearities
- Input/Output -saturation

include two pictures here worksheet 4.6, 4.6 or 4.7



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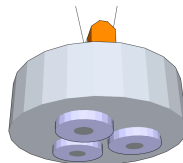
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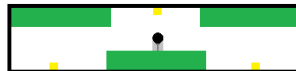
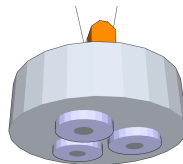
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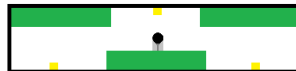
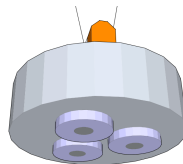
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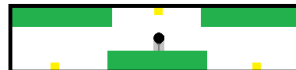
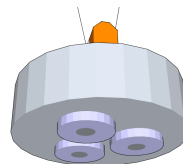
► Trolley

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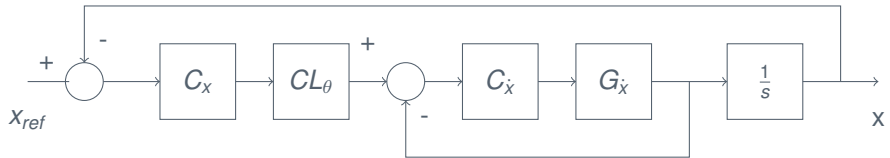
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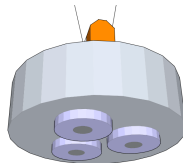
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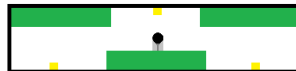
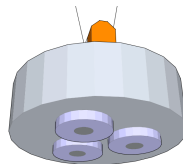
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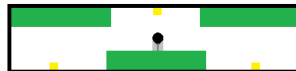
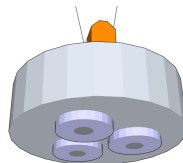
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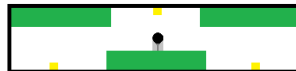
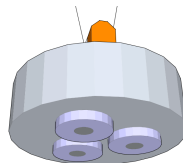
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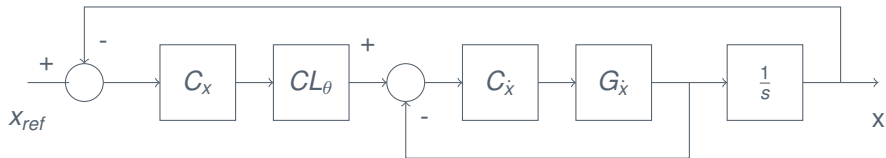
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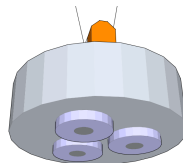
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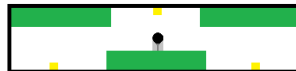
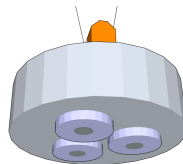
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► Trolley

► Elektromagnet

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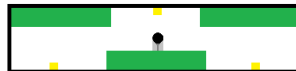
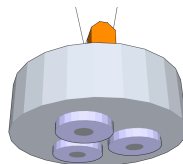
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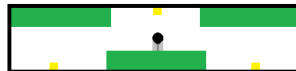
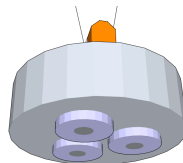
► Trolley

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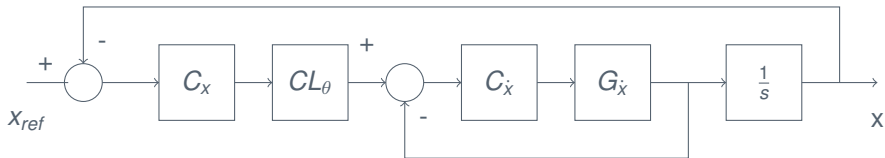
► Vinkel sensor

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► Statisk friktion





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