

Diplomarbeit / Studienarbeit

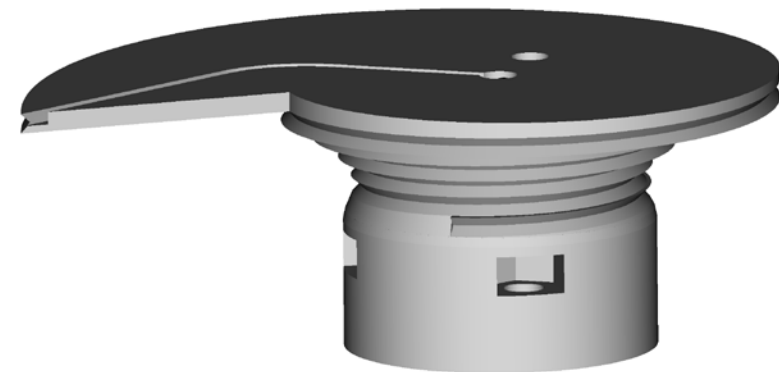
Modeling of cable robots with cable drums with variable radius



Cable robots are parallel kinematic systems that use flexible cables instead of rigid connecting elements. This allows large areas to be covered at high speeds. The cables are usually wound onto drums, with the drum radius determining the transmission ratio between angular speed and cable speed as well as between torque and cable force. Cable drums with variable radius allow the transmission ratio to be adjusted along the cable length

Possible tasks are:

- Mathematical description of the kinematics and kinetics
- Software implementation of the model in Python
- Experimental validation



Kontakt

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