

## Minutes

### Attendance

Mayke scheffer is late

You can always give feedback to any person in the group

Two people can deliver one SSA

Someone assigned to search the discussions before meetings

Make summaries of SSAs per meeting!!!

### Presentation

Formulas are set up for theta 3 and 4. As well as the position of the gripper from angles.

Maybe use a relative  $x(r)$  coordinate, this way this wont change when phi changes

### SSAs

Add accuracy in RPCs

Define what the focus will be of our group

For every controller we want a x amount of phase/gain margin

Constraints: it shouldn't break/ push it to the limits

Calculate maximum velocity of the arm, the input is the voltage and the output are encoder signals.

Mayke thinks something is missing in the transfer function. But its split up by our feedforward and feedback.

Create a 'nice' pattern with the bolts if possible.

If many people are going to edit the system on the fly, version control with GIT needs to be used. Otherwise it is not manageable and is really inconvenient. We could use the manual of mayke

Add part of Mike to the experiment plan.

### Discussion

Summary file, everyone does add its own one into one overleaf file.

Experimentation plan should be handed in before the 8<sup>th</sup> of may. SSA

### New SSAs

Experimentation plan – 1 (Mike)

Concepts for control systems (could use youtube of previous controllers) – 5 (Paul, Sjoerd, Mayke, Milan, Marijn)

Validating kinematic structure including Matlab script – 1 (Max)

How the motors works: input voltage/output ... + maximum velocity

([https://canvas.tue.nl/courses/9981/files/2356614?module\\_item\\_id=178163](https://canvas.tue.nl/courses/9981/files/2356614?module_item_id=178163))- 1 (Roel)

Presentation

Roel