**06-04-2018 Referat møde med Waqas**

**First step is to build the physical system.**

Specify requirements.

We need:

* Thermo box
* Heat element
* Temperature sensor
* Possibly an independant and adjustable fan. But even a lid with some holes can be sufficient to begin with.

**Next we find the physical capacities of the elements in the system.**

We need to define:

* min. and max. temperatures that we want.
* 2-3 minutes to arrive at certain temperature is ok.
* Operating area. Eg. 0 - 10 V.

**Then we take I/O measurements of the system with different step values.**

If we assume operating operating area to be 0 - 10 V we could use step values of eg. 3, 5 and 7 V.

2-3 data sets with the different step values are needed.

**When we have the measurements we can make the model in Simulink.**

**General notes:**

Other parameters to consider are:

* Size of the thermo box
* Power of the heating element
* Heat leakage

Important that we assign specific tasks for everyone.

Find help on the internet about the dynamics of the system.





