Supervisor meeting

Wednesday, 08th of March 2017

Status

- We have set up ROS for the initial tests.
- We have made the charger
- We did mostly research this week. On robust control and on trajectory generation.

Reducing the model

- We can reduce the model if there are some states that we do not need.
- We also remove $\dot{y}_{\rm b}$ state as the model is to be used in control design.
- With non linear control we could actuate along the y_b axis by using the couplings from damping and Coriolis effects.
- A boat movement can be seen to be similar to that of a car. You can move sideways if you maneuver.

Controller for the low level

- The input is the heading and the speed and the output is the input to the motors.
- A drawing of all the control structure and how the different controllers interact could be a good idea.

Simulation

• Now the simple simulation is fixed.

RTK-GPS

• We will know about the RTK GPS when Simon is back. Probably tomorrow.

Path Planning

- You have a simple predefined scenario, a straight line for example, and then you apply your controller. This way it is easy to evaluate the performance of the controller.
- We need to consider how to keep ourselves on the path, how to reach the path when we are not there, how to make a control that is good when turning, among others.

Next Supervisor Meeting

Wednesday, 15th of March at 13:00