

## **Pendubot Progress report 3**

### **1. Recall of the objectives:**

- **Update the website and put it on line**
- **Write the midterm report**
  - Decide on the Report's plan
  - Learn how to use Latex
  - Write the report
- **Prepare the Midterm presentation**
- **Swing-up control**
  - Make some change in the parameters on Simulink
  - Implement the Down-up Swing-up in Labview
  - Implement the Up-up Swing-up in Labview
  - Try to simulate it
- **Movement from Up-up to Down-up**

## 2. Achieved work:

- **Update the website and put it on line**
- **Write the midterm report**
  - Decide on the Report's plan
  - Learn how to use Latex
  - Write the report
- **Prepare the Midterm presentation**
- **Swing-up control**
  - Make some changes in the parameters on Simulink
  - Implement the Down-up Swing-up in Labview
  - Implement the Up-up Swing-up in Labview
  - Try to simulate it
- **Movement from Up-up to Down-up**
  - Define clearly the strategy
  - Implement it on Labview
  - Simulate it step by step

## 3. Problems:

- We manage to switch between two controllers but if we put all controllers together the simulation does work anymore.
- Our swing-up design is not optimal at all, we have to improve it. Indeed it works in theory (in Simulink) but not in reality.

## 4. Objectives of next week:

- Implement the safety net on Simulink and try it.
- Find a solution for the swing-up control.
- Update the website.

## Global progress of the project (*Schedule's update*)

