

## **International project course in Automatic Control, FRT100**

### **Problem formulation - spring 2011**

**4,5 ects**

As of 2011

#### **Conceptual design of a cleaning system for oxygen pipes**

##### **Task description:**

Analysis of different cleaning methods with regard to current regulations. Conceptual design of alternative cleaning methods.

##### **Problem description:**

The cleaning of the oxygen pipe lines for the customer Airbus is currently manual only. A fixed amount of cleaning agent is filled into the pipe, the pipe is sealed and moved manually. Then the pipe rests for a set time before it is emptied. The cleaning agent is collected and analyzed. If both particle determination and the determination of dry residue provided acceptable results, the pipe is packaged and ready for dispatch.

To increase the reproducibility and with the goal of a higher mechanization, the possibility of using a cleaning system should be investigated. The relatively low quantity and high number of variants in diameter and length of the tubes should be taken into account.