

## Lecture

Topics:

- Modelling with Timed Automata in UPPAAL.
- Introduction to Mandatory Assignment 1.
- Coping with the stop problem.

## Readings

1. Read sections 4–7 in [UPPAAL] (with emphasis on section 6).
2. Read the description of the mandatory assignment (on DTU Learn)

## Exercises

### Exercise 1: Urgency, commitment and deadlock

In order to understand the precise semantics of urgency, commitment and deadlock, device some small model examples which demonstrate:

1. The difference between urgent and committed locations.
2. The effect of making a channel urgent.
3. The semantics of broadcast.
4. That absence of deadlock (in the UPPAAL sense) does not exclude time-lock.

The models should have accompanying queries which detect the semantic effects.

## Assignment Work

Start working on Mandatory Assignment 1.

You should have carefully read section 1 of the project description and skimmed sections 5 and 6 before embarking on modelling the system. Ask the TAs if you have any questions on how the system works.

As indicated, you should start by making a model of the physical part.

Hint: Make a template that reflects the possible travelling of a single bag.