



ALBERT-LUDWIGS-
UNIVERSITÄT FREIBURG

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Tutorials for Cyber-Physical Systems - Hybrid Models

Exercise sheet 7

Exercise 1: Hybrid automata

Please describe the two classes of transitions of hybrid automata.

Exercise 2: LTL and CTL Formulae

Please give the definition of the equality $\Phi = \Psi$ where Φ is an LTL formula and Ψ is a CTL formula.

Exercise 3: Automata classes

What is the main difference between

- (a) rectangular automata and initialized rectangular automata;
- (b) rectangular automata and singular automata;
- (c) singular automata and stopwatch automata;
- (d) stopwatch automata and timed automata.