
Safety and Reliability of Embedded Systems

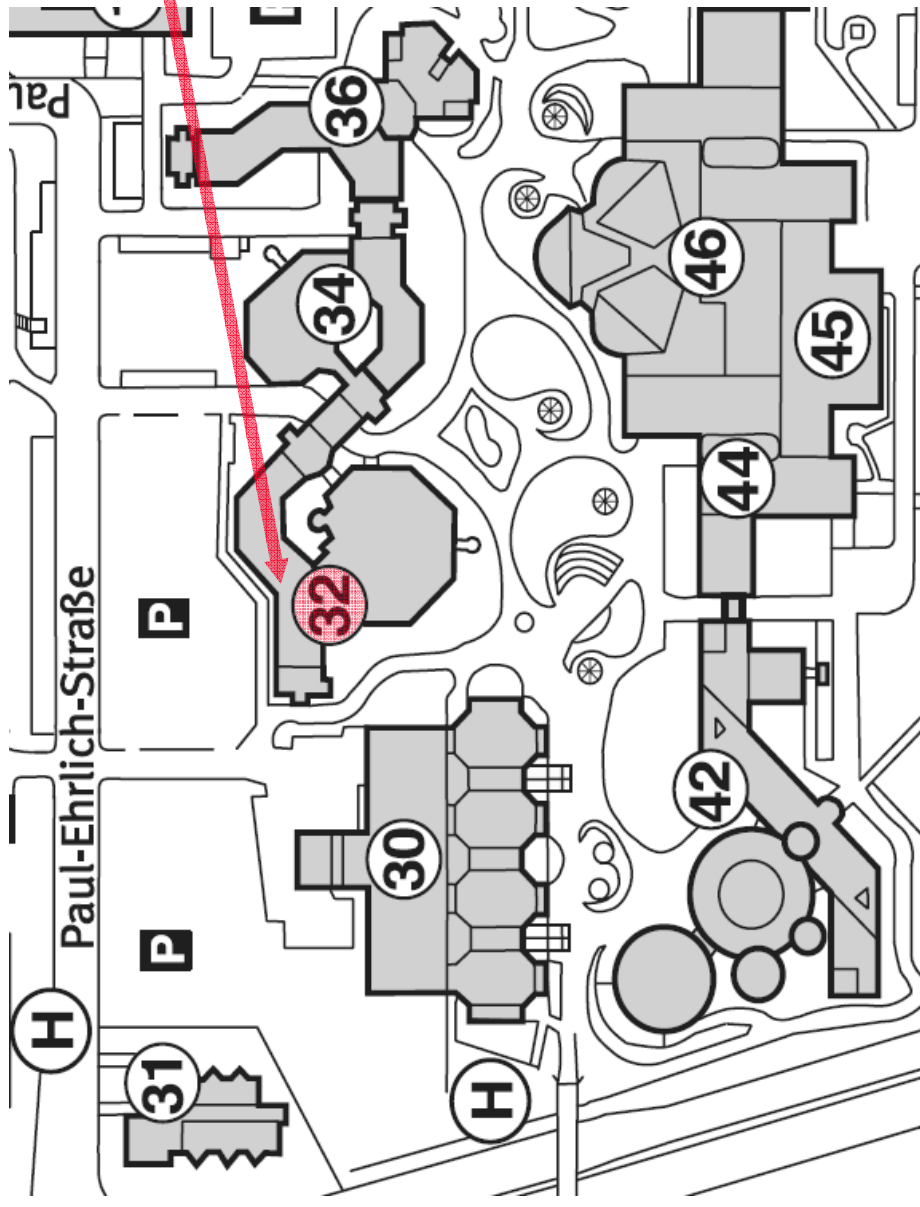
(Sicherheit und Zuverlässigkeit eingebetteter Systeme)

Welcome!

Administrative Issues

- Lecture held by AG Software Engineering: Dependability
 - <http://agde.informatik.uni-kl.de/teaching/suze/ws2006>
 - LV-Nr. 89-3331 / 89-3331U
- Lecturer
 - Prof. Dr. Peter Liggesmeyer
 - Email: liggesmeyer@informatik.uni-kl.de
 - Office hours on appointment
 - Room: 32-425
- Tutor
 - Dipl.-Ing. Nikolas Mayer
 - Email: mayer@informatik.uni-kl.de
 - Phone: (0631) 205-3957
 - Office hours: Monday, 10:00 - 11:30, or on appointment
 - Room: 32-427

Administrative Issues



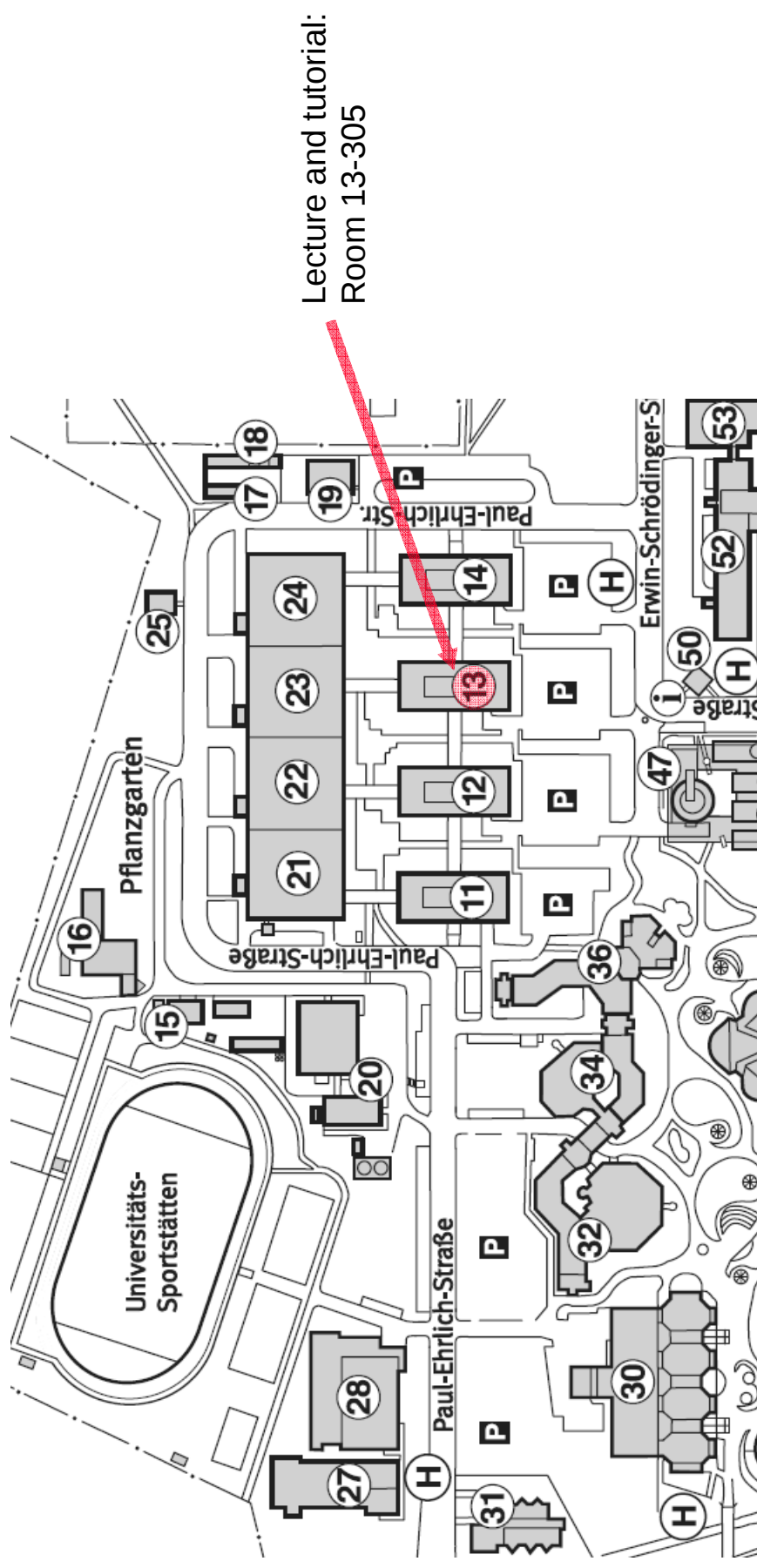
AG Software Engineering: Dependability
Technical University of Kaiserslautern
Building 32, 4th Floor
P.O. Box 3049
67653 Kaiserslautern
Germany

Administrative Issues

- Schedule
 - Lecture (2 SWS)
 - Held weekly
 - Monday, 13:45 - 15:15, Room 13-305
 - Tutorial (1 SWS)
 - Held every two weeks (usually)
 - Thursday, 13:45 - 15:15, Room 13-305
 - Start of tutorials: Thursday, November 2

- Grading by written or oral exam (mode and date will be announced within lecture and tutorial)

Administrative Issues



Lecture and tutorial:
Room 13-305

Administrative Issues

- ☐ Lecture notes
 - Available online at:
<http://agde.informatik.uni-kl.de/teaching/suze/ws2006/material/vorlesung/>
 - Format: PDF or Postscript
- ☐ Problem sheets
 - Available online at:
<http://agde.informatik.uni-kl.de/teaching/suze/ws2006/material/uebung/>
 - Format: PDF or Postscript
 - There will be no solutions published, so it is highly recommended to attend the tutorial sessions!
 - Please note that there is no handing-in and no marking of solved problem sheets

Administrative Issues

- Goals of lecture
 - Get to know selected formal and stochastic techniques for safety and reliability analysis of software and systems
 - Be able to use particular analysis methods in practice

Administrative Issues

□ Topics

- Introduction
- Terminology
- Risk Acceptance Methods
- Safety and Reliability Analysis Models
- FMECA (Failure Modes, Effects and Criticality Analysis)
- Fault Tree Analysis
- Symbolic Model Checking
- Stochastic Reliability Analysis
- Quality Assurance and Quality Management

Administrative Issues

- Goals of tutorial
 - Work-out solutions to problem sets
 - Clarification of issues concerning the lecture
 - But: The intention is not to provide a substitute for the lecture!
- Topics
 - Same as lecture