

Lecture 10

Conclusions

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Exams and grades

Saturday, February 1st, 2025

- Written exam 2h - ~~Wednesday, 31.01.2024~~ from 9h15 to 11h15
 - ▶ room ~~501~~ C01
 - ▶ 5/6 sections, one made of questions with multiple choice (select all statements that are true)
 - ▶ return only the booklet (space for answers provided)
- Closed book, closed notes, **no computers**. Bring with you a pen, an eraser, an ID and a non-programmable calculator
- You are also permitted to bring **one crib sheet**, formatted on A4 paper. The sheet must be **handwritten only** (no tablet-generated content or copies of the slides), and you may use both sides
- Scratch paper will be provided

Exams and grades

- Each problem will give a maximal number of points, clearly indicated. The total is 100 points. Example (NOT the real numbers):

Problem:	1	2	3	4	5	6	Total
Value:	20	20	15	15	15	15	100
Grade:							

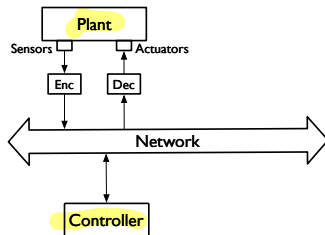
- Final grade

Points	96-100	91-95	...	56-60	51-55	...	6-10	1-5	0
Grade	6.00	5.75	...	4.00	3.75	...	1.50	1.25	1.00

Covered topics

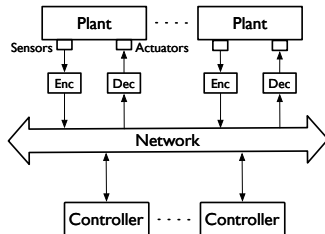
Part 1: Challenges - mostly 1 plant, 1 controller setting

- Review of LTI systems and LMIs
- Control networks and NCS
- Impact of delays
- Impact of packet drops



Part 2: Opportunities - multiple systems

- Coordination motivating examples
- Elements of graph and matrix theory
- Discrete-time consensus
- Continuous-time consensus



Before ending ...

Course slides

Updated versions of all slides are available on Moodle

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Feedback

Do not hesitate to send an email if you have comments or ideas about how to improve the course!

- the same course will be inflicted to other students: help them not to suffer from the same mistakes of the teacher :-)

Thank you !