# MS-A0001 Matrix Computations

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#### General

- Lecturer:
  - Senior Lecturer Harri Hakula, TkT M311
- Assistant:
  - Milo Orlich, PhD

## Why?

- Mathematics is the language of science.
- Modern computing devices lead to demands of higher abstractions.
- Computer computes, human thinks...
- Computational power increases... What is available in 2027? 2037? 2047?
- One has to respect the mathematical proofs!

#### Mathematics

- Basic courses in mathematics prepare students for
  - The more advanced courses.
  - Presenting logical thinking written with mathematics for their peers.

Do we study for life? (Or for the next exam?)

#### Teaching in Our Course

- Lectures:
  - Lecturer presents one interpretation on the subject matter.
- In the exercises problems are solved under guidance of the TAs.
- Homework is graded by peer-review.
- STACK-problems are personalised for individual study.

## Learning Material

- Strang, G., Introduction to Linear Algebra or Linear Algebra and Its Applications
- Supplemental material on MyCo
  - Youtube, Wikipedia, etc. (Caution is advised!)

## Grading

- No preset distributions are applied. Every student can get the highest grade.
- In continuous assessment homework and the course exam are the basis for assessing learning.

Normal exams take place four times a year. Separate registration is required.

## Asymmetry

#### Teacher

Goals Method Grading Grading Learning Strategy

Student

#### Communication

- MyCo is the reference.
- Latest news are of course available during lectures.
- Office Hours:
  - Hakula: after lectures, by appointment.
  - Orlich: by appointment.

## To infinity and beyond!

**Buzz Lightyear** 

# We are not doing this because it is easy, but because it is hard.

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