

# High performance parallel systems

## Lecture 1 - Introduction

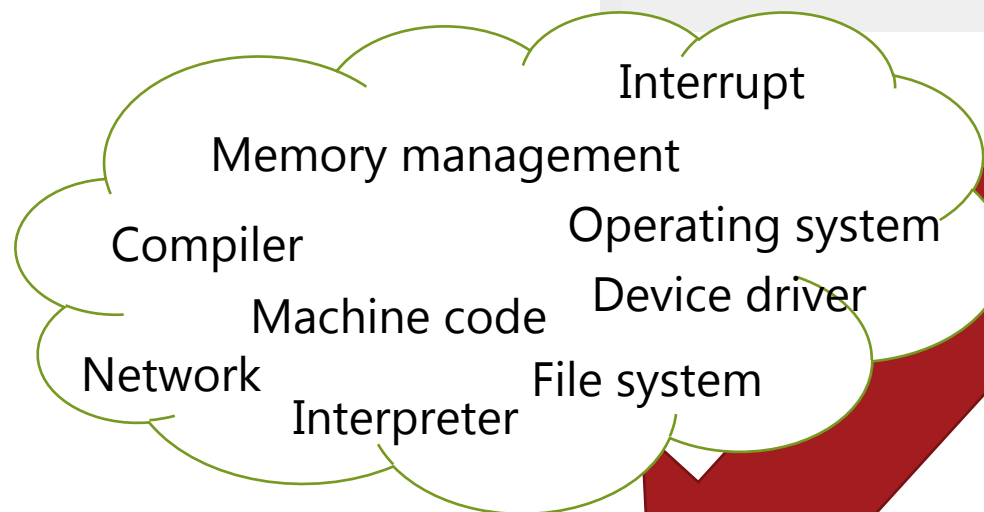
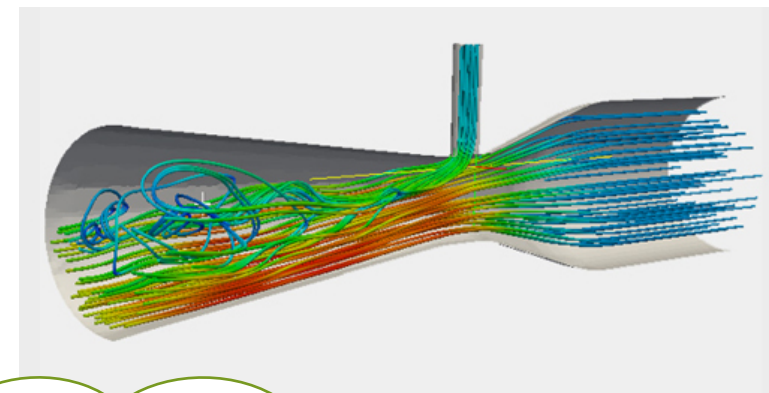
Kenneth Skovhede & Troels Henriksen

UNIVERSITY OF COPENHAGEN



Image from: <https://www.simscale.com/product/cfd/>

# Brief course introduction



# People teaching the course

## **Lecturers**

- Kenneth Skovhede, NBI
- Troels Henriksen, DIKU

## **Teaching Assistants**

- Georgios Garidis
- Laurent Lindpointner
- Albert Alonso de la Fuente

# Flipped classroom

## **We use pre-recorded videos instead of lectures**

- We use the allocated timeslots for lab sessions
- The labs will be used to try practical things with assistance
- We will discuss solutions and problems

# Teaching materials

## Course outline

- Overview of all activities

## Course website

- <https://github.com/diku-dk/hpps-e2020-pub>

## Books

- Computer Systems – A Programmers Perspective (3<sup>rd</sup> intl. edition)
- Modern C (2<sup>nd</sup> edition, 2. rev)

In stock from Nov. 19<sup>th</sup>

Free PDF

## Other materials (look at website)

- Lecture notes
- Exercises
- General stuff

## Absalon

- Used for assignment uploads

# Communication

**Absalon discussion forum**

**Discord**

<https://github.com/diku-dk/hpps-e2020-pub#discord>

# Types of activities

## Reading

- You can choose to read before or after watching the videos
- Provides in-depth information about the topic

## Videos

- Should be watched before attending the labs
- Provides high-level explanations and elaboration of focus topics

## Labs

- Practical hand-on experience with the material from reading and video
- Feel free to use this to ask questions!
- Helps with assignments and exam

## Exercises

- Theoretical exercises (da: regneopgaver)
- Experience with exam-like questions

# When, what, where?

## Labs

- Tuesday – online only
- Thursday – Lille UP1 + online



**Zoom link:** <https://ucph-ku.zoom.us/j/63242906073>

## Exercises

- Thursday
  - Group 1 – DatØK: **1-0-14**
  - Group 2 – DatØK: **1-0-34**
  - Group 3 – ML: **A111**
  - Group 4 – ML: **1-0-30**

## Study group

- Fridays

**For today only:** second hour is a lab-session!



# Assignments

- **4 assignments**
  - appx 1.5 week pr. Assignment
  - Hand-in via Absalon
- **Graded 0-4 points**
  - No re-submissions
- **Need 8 points to qualify for exam**

# Exam

## **Exam is a 4-hour written exam**

- All aids allowed (no internet...)
- Focus on theoretical questions
- Tests skills from assignments and exercises

# Lab session for today

For the following lab sessions, look at the website

<https://github.com/diku-dk/hpps-e2020-pub>

Today, we will focus on getting things set up, testing the compiler etc.