

Partial Differential Equations - MAT 234

Instructor: **Henrik Kalisch**

Office: **Realfagbygg 4A8d**

Overview

The purpose of this course is to introduce students to the theory and applications of partial differential equations. The course will be roughly divided into three parts. First, we will consider exact representations of solutions for the following four basic equations: the transport equation, the heat equation, Laplace's equation and the wave equation. Next, the theory for elliptic boundary-value problems will be studied. In the last part, hyperbolic conservation laws will be treated.

Format

- Lecture on Wednesdays, 14:15 - 16:00, Realfagbygg 4A5d.
- Lecture on Fridays, 14:15 - 15:00, Realfagbygg 4A5d.
- Tutorial on Fridays, 15:15 - 16:00, Realfagbygg 4A5d.

Textbook

Partial Differential Equations, by Lawrence Craig Evans,
American Mathematical Society, 1998.

Homework

Homework problems will be assigned every week. There will be up to three mandatory homework assignment during the semester, and a passing grade on these assignments is necessary to register for the final exam.

Final Exam

The final exam will be an oral exam. The date for the exam has not yet been set.

Final Grade

The final grade will be determined by the performance on the final exam.