



FDD3381 sum of Square Seminar 7.5 credits

Kvadratsumme-seminarium

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for FDD3381 valid from Autumn 2017

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After passing the course, the students should be able to:

- explain the fundamental ideas behind the sum-of-squares hierarchy
- apply the sum-of-squares hierarchy on small problem instances

- account for the most important results about the sum-of-squares hierarchy
- account for current research about the sum-of-squares hierarchy and the large open problems at a general level.

Course contents

The sum-of-squares hierarchy, algorithms that can be formalised by the sum-of-squares hierarchy and lower bounds for the sum-of-squares hierarchy

Course literature

Lecture notes and research articles about the sum-of-squares hierarchy.

Examination

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Home assignments and presentation of research article.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.