SIAM Student Chapter

Charles University in Prague

Knowledge is nothing if not shared

SIAM SC seminar

once a month on Wednesday at 14:00
in the seminar room of MUUK (3rd floor)

What is it? The seminar is suitable not just for graduate students but for everyone interested in regular meetings over problems in mathematics. Meet your colleagues once a month and find out what is new in the field.

Why to come? We are bringing a wide variety of topics while the talks are designed to be easy to understand by non-experts. The goal is to convey a basic orientation in various areas of mathematics.

Upcoming seminar: **March 4, 2020**

The complexity of solving equations

Michael Kompatscher, Ph.D.

One of the oldest problems in algebra is to decide whether an equation over a given algebraic structure has a solution or not. In the last decades this problem received increasing interest from computational complexity point of view.
For finite algebras the naive algorithm of 'guessing' solutions always works (and thus the problem is in NP). However for many algebras algorithms with better, i.e. polynomial, runtime are known (e.g. Gaussian elimination). In particular groups, rings and lattices that allow polynomial-time algorithms are (almost) completely classified. In my talk I would like to give an introduction to these results and discuss some of the difficulties in generalizing them to all finite algebras.

You can also look forward to a discussion with SIAM SC members.
Nonalcoholic drinks and pizza included!

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