



SIAM SC seminar

once a month on **Wednesday at 14:00**
in the seminar room 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: **November 27 2019**

Measuring Dissimilarities Between Spatial Point Patterns

Kateřina Kořasová

Spatial point processes are useful mathematical models that describe the arrangement of objects randomly placed in space. Such models are of particular interest in many scientific disciplines, including biology, ecology, particle physics or material science. In practical applications, a bunch of points on some bounded region in a plane or space is observed, whose number and locations are random. Such a collection of points is then called point pattern. Comparing two point patterns as well as describing in what manner they differ could be quite a demanding task. A tool for quantifying how similar or better dissimilar two point patterns are is thus needed.

We will see various examples of point pattern data and we will discuss different methods of measuring dissimilarities between point patterns. We especially aim to describe functional summary characteristics used in spatial statistics and outline how they can be applied to build a reasonable dissimilarity measure. To better illustrate the issue, these dissimilarity measures will be used to solve the classification task in the context of replicated point patterns.

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

