

# Extremal Set Theory

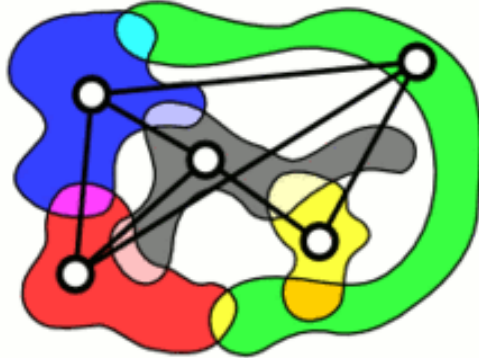
This seminar is an introduction to extremal set theory - a fast-growing field of discrete mathematics that investigates questions of the following type: if we have a collection of sets satisfying certain restrictions, how large or how small can it be? For example, if any two sets in a collection of subsets of an  $n$ -element set intersect non-trivially, one can determine the largest number of sets in such a collection exactly.

The seminar will be based on selected chapters of the book "Extremal Combinatorics" by Stasys Jukna and additional literature.

**Prerequisites:** linear algebra

**Instructors:** Prof. M. Axenovich and Dr. A. Riasanovsky

**Contact:** maria.aksenovich@kit.edu, alexander.riasanovsky@kit.edu



This seminar is open for bachelor and for master degree students.

There are still some slots available. Please contact us soon if interested.