

Sofia - Kovalevskaya - Lecture



Prof. Dr. Kim Ruane
(Tufts University)

**March 31st 2022, 4:00 pm,
Room H12**

Title:

CAT(0) Groups; Example and Non-Examples

Abstract:

In this talk, we will discuss the class of CAT(0) groups. A finitely generated group G is a CAT(0) group if G acts properly discontinuously and cocompactly by isometries on a CAT(0) space. We will recall several well-known examples as well as non-examples in the hopes of understanding methods for constructing CAT(0) spaces as well as obstructions for showing that no such space can be found. We will also discuss groups for which the question of being CAT(0) is still open. It is a well-known open problem to decide whether the braid groups on more than 6 strands are CAT(0) or not. We will focus on a different family of examples - namely, the automorphism groups of right-angled Coxeter groups and their subgroups.

Jury

Barbara Baumeister (Bielefeld University)

Bettina Eick (TU Braunschweig)

Barbara Gentz (Bielefeld University)