Seminarium geometrów

Wtorek, 12.10.2021, 15:15 s. HS

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CAT(0) groups and biautomaticity

Abstract: Recall that a *Leary–Minasyan group* is an HNN-extension of $\mathbb{Z}^n$ in which both associated subgroups have finite index. Ian Leary and Ashot Minasyan used these groups to provide first examples of groups that are CAT(0) but not biautomatic. There is also a "hyperbolic" version of these groups, recently studied by Sam Hughes, given by replacing $\mathbb{Z}^n$ with the fundamental group of a closed orientable surface of genus $g \geqslant 2$.

This talk will consist of two parts. In the first part, I will explain why the "usual" Leary–Minasyan groups cannot be subgroups of biautomatic groups, unless they are biautomatic themselves. In the second part, based on joint work in progress with Sam Hughes, I will tell you what we can say about the "hyperbolic" version.

streaming via ZOOM:

Meeting ID: 967 6507 7409

Meeting password: "GS"(two letters) followed by the Euler characteristic of the closed orientable surface of genus 89.