Seminarium geometrów

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Poniedziałek, 11.12.2023, 14:15 HS

Leonardo Ferrari (IMPAN)

Geometric Bordism and Riemann Surfaces with Large Automorphism Groups

Abstract: In this talk, we will introduce the problem of bounding geometrically, that is, whether a closed hyperbolic manifold can occur as the totally geodesic boundary of another compact hyperbolic manifold. We will distinguish this from the topological bordism problem, mention obstructions and talk about the connected problem of totally geodesic embeddings of manifolds. We will then recall results on the conformal automorphism groups of Riemann surfaces, and present some families of surfaces which are characterized by their groups. Finally, we will introduce the Davis-Januszkiewicz technique to construct manifolds from polyhedra, and use it to prove that these families of surfaces bound geometrically in most cases.

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.