Seminário de Álgebra

Profinite genus of fundamental groups of compact flat manifolds with the cyclic holonomy group of square-free order

Genildo Nery
UNB

16/04/2021
14:30 Horas

Zoom

Abstract.

Let $\mathfrak{C}$ be a family of finitely generated residually finite groups and $\Gamma \in \mathfrak{C}$. The $\mathfrak{C}$-genus of Γ is the set of isomorphism classes of groups from $\mathfrak{C}$ which have the same profinite completion as the fixed group Γ. In this talk I will present a formula for the cardinality of the $\mathfrak{C}$-genus of a n-dimensional Bieberbach group the with cyclic holonomy group of square-free order. As a consequence, we can deduce the extent to which an n-dimensional compact flat manifold with the cyclic holonomy group of square-free order can be determined by the profinite completion of its fundamental group.

This work was carried out under the guidance of Prof. Pavel Zalesskii.