Profinite completion of groups and 3-manifolds

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Abstract

In this talk we will consider profinite completions of 3-manifold groups and discuss some properties or invariants of a compact 3-manifold which can be detected by the profinite completion of its fundamental group. In particular we will show that a map between two compact orientable, aspherical 3-manifolds with empty or toroidal boundary induces an isomorphism of the profinite completions of their fundamental groups if and only if it is a homotopy equivalence. This is a joint work with Stefan Friedl.