ON RECENT ADVANCES ON THE PROFINITE RIGIDITY OF FREE AND SURFACE GROUPS.

ANDREI JAIKIN ZAPIRAIN AUTONOMOUS UNIVERSITY OF MADRID- SPAIN

Abstract:

I will discuss recent results about the Profinite Rigidity of free and surface groups. In particular I will explain the proofs of the following two results:

- 1) Let $\phi: F \to G$ be an injective map from a free group to a residually finite group inducing an isomorphism of profinite completions. Then ϕ is an isomorphism.
- 2) Let G be a residually finite one-relator group having the same profinite completion as a surface group. Then G is surface. (joint with Ismael Morales)