Publicacions més rellevants de la línia de recerca:
Teoria geomètrica i combinatòria de grups

Referència: Martino, A., Ventura, E. A description of auto-fixed subgroups in a free group. *Topology*, **43** (2004), pp. 1133-1164.

Abstract: Let F be a finitely generated free group. By using Bestvina-Handel theory, as well as some further improvements, the eigengroups of a given automorphism of F (and its fixed subgroup among them) are globally analyzed and described. In particular, an explicit description of all subgroups of F which occur as the fixed subgroup of some automorphism is given.

Referència: Cannon, J.W., Dicks, W. On hyperbolic once-punctured-torus bundles II: fractal tessellations of the plane. *Geom. Dedicata*, **123** (2006), pp. 11-63.

Abstract: We describe fractal tessellations of the complex plane that arise naturally from Cannon-Thurston maps associated to complete, hyperbolic, once-punctured-torus bundles. We determine the symmetry groups of these tessellations.

Referència: Burillo, J., Cleary, S., Röver, C. Commensurations and finite-index subgroups of Thompson's group F. *Geom. Topol.*, **12** (2008), pp. 1701-1709.

Abstract: We determine the (abstract) commensurator $Com(F)$ of Thompson's group F and describe it in terms of piecewise linear homeomorphisms of the real line and in terms of tree diagrams. This implies that $Com(F)$ is not finitely generated and enables us to determine which subgroups of finite index in F are isomorphic to F. We also prove that the commensurator group is a subgroup of the quasi-isometry group of F.