

**Publicacions més rellevants de la línia de recerca:
Deformacions de estructures geomètriques**

Referència: Boileau, M.; Leeb, B.; Porti, J. Geometrization of 3-dimensional orbifolds. *Ann. of Math. (2)* **162** (2005), no. 1, 195–290.

Abstract:

This paper is devoted to the proof of the orbifold theorem: If O is a compact connected orientable irreducible and topologically atoroidal 3-orbifold with nonempty ramification locus, then O is geometric (i.e. has a metric of constant curvature or is Seifert fibred). As a corollary, any smooth orientation-preserving nonfree finite group action on S^3 is conjugate to an orthogonal action.

Referència: Bessières L-, Besson G., Boileau M., Maillot S. and Porti J. Collapsing irreducible 3-manifolds with nontrivial fundamental group *Inventiones Math.* **179** (2) (2010), pp. 435-460

Abstract: Let M be a closed, orientable, irreducible, non-simply connected 3-manifold. We prove that if M admits a sequence of Riemannian metrics which volume-collapse and whose sectional curvature is locally controlled, then M is a graph manifold. This is the last step in Perelman's proof of Thurston's Geometrisation Conjecture.

Referència: Miranda, E. and Nguyen Tien, Z. A note on equivariant normal forms of Poisson structures. *Math. Res. Lett.* **13**(5-6) (2006), pp 1001–1012.

Abstract:

We prove an equivariant version of the local splitting theorem for tame Poisson structures and Poisson actions of compact Lie groups. As a consequence, we obtain an equivariant linearization result for Poisson structures whose transverse structure has semisimple linear part of compact type