

- **Corro, Diego: Manifolds with singular Riemannian foliations by aspherical leaves (204)**

Singular Riemannian foliations are generalizations of smooth group actions acting by isometries.

In particular, torus actions by isometries on a given Riemannian manifold have been studied to understand the topology of the manifold or properties the Riemannian metric might have.

We extend this study to the setting of singular Riemannian foliations by tori. We show that some techniques developed for comparing two torus actions can be carried to the foliated setting. For the case when the foliation has codimension 2 we obtain the following result:

If (M, F) is a singular Riemannian foliation of codimension 2 by tori, on a compact, simply-connected Riemannian manifold, then the foliation is induced by a smooth torus action.