CATHERINE SEARLE, IMATE–UNAM Cuernavaca
Non-negatively curved manifolds with maximal symmetry rank

We consider compact, simply-connected, non-negatively curved Riemannian manifolds admitting and isometric torus action. We classify up to diffeomorphism 5-manifolds with maximal and almost maximal symmetry rank and as a result of our work we can show that the maximal symmetry rank for this class of n-manifolds in dimensions less than or equal to 9 is $\left[\frac{2n}{3}\right]$, where n is the dimension of the manifold.

This work is joint with Fernando Galaz Garcia.