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Zheting Dong* (dongzh@oregonstate.edu), Corvallis, OR 97330. *Symmetry rank of non-negatively curved manifolds.*

The group of isometries G of a compact Riemannian manifold M is a compact Lie group. The symmetry rank of M is defined as the rank of G . For a manifold with positive sectional curvature, we know that the symmetry rank is roughly half the dimension of M by results of Grove and Searle. For the case of a closed, simply-connected, non-negatively curved manifold, it is conjectured that the symmetry rank is roughly two-thirds the dimension of the manifold. In this talk we will discuss recent work on closed, simply-connected, non-negatively curved manifolds that admit an almost isotropy-maximal torus action.

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