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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