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Lawrence Mouillé* (lmoui001@ucr.edu). *Positive intermediate Ricci curvature with symmetries*. Preliminary report.

Positive intermediate Ricci curvature, denoted $\text{Ric}_k > 0$, is a condition which interpolates between positive sectional curvature and positive Ricci curvature. Though this curvature condition has existed in the literature for several decades, few structure results or non-trivial examples exist. In this talk, I will illustrate new examples of $\text{Ric}_k > 0$. I will also describe upper bounds on the symmetry rank for manifolds with $\text{Ric}_k > 0$ that generalize the Grove-Searle bound for positive curvature and the Wilking bound for quasi-positive curvature. Finally, I will present a classification result for manifolds with $\text{Ric}_k > 0$ and large symmetry rank. (Received September 10, 2019)