

# Circle Actions on Positively Curved 4-Orbifolds

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## **Abstract**

A famous theorem of Hsiang and Kleiner states that if  $S^1$  acts on a positively curved 4-dimensional manifold, then the manifold is homeomorphic to either  $S^4$ ,  $RP^4$  or  $CP^2$ . In this talk we will talk about a possible generalization to the orbifold case, and discuss several interesting examples.