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Suhyoung Choi* (schoi@math.kaist.ac.kr), Department of Mathematical Sciences, KAIST, Yuseong-Gu Guseong, Daejeon, 305-701, South Korea. *The classification of radial ends of properly convex real projective orbifolds*. Preliminary report.

Real projective structures on n -orbifolds are useful in understanding the space of representations of discrete groups into $SL(n+1, R)$. A recent work shows that many hyperbolic manifolds deform to manifolds with such structures not projectively equivalent to the original ones. The purpose of this paper is to understand the structures of ends of real projective n -dimensional orbifolds. In particular, we will study ones with the radial ends. These include hyperbolic manifolds with cusps and hyperideal ends. The main techniques are the theory of Fried and Goldman on affine manifolds and the work on Riemannian foliations by Molino, Carrière, and so on. For this, we will need to study the natural conditions on eigenvalues of holonomy representations of ends when these are manageably understandable. We will show that only the concave ends or horospherical ends exist for irreducible properly convex real projective orbifolds under the conditions. We also discuss the ends completed by totally geodesic boundary orbifolds and their duality to radial ends. (Received September 05, 2013)