

Title: Cohomogeneity one conformal actions on the 3-sphere and the three-dimensional Euclidean space

Author(s): Parviz Ahmadi and Masoud Hassani

The aim of this paper is to classify cohomogeneity one (and zero) conformal actions on the three-dimensional Riemannian spaces whose conformal groups are essential, up to orbit equivalence. Among other results, for any such Riemannian space M, the representations of connected Lie groups acting with cohomogeneity one or zero on M are determined in the conformal group of M up to conjugacy and then up to orbit equivalence. Also the orbits are specified up to conformal equivalence.

Address:

Parviz Ahmadi Departmental of Mathematics University of Zanjan University blvd. Zanjan Iran Address: Masoud Hassani School of Mathematics Institute for Research in Fundamental Sciences (IPM) P. O. Box 19395-5746 Tehran Iran