Abstract

Let Hn+1 denote the n+1-dimensional (real) hyperbolic space and let Sn denote the conformal boundary of the hyperbolic space. M(n) denotes the group of conformal diffeomorphisms of Sn and Mo(n) be defined as identity component which consists of all orientation preserving elements in M(n). Conjugacy classes of isometrics in Mo(n) depends on the conjugacy of T and T-1 in Mo(n). For an element T 2 M(n), T and T-1 are conjugate in M(n), but they may not be conjugate in Mo(n). T is called real if T and T-1 are conjugate to each other in M0(n). Let T be an element in Mo(n), so to T there is an associated element To in SO(n + 1). If the complex conjugate eigenvalues of To are given by fei j ; e□i jg, 0 < j 6 , j = 1; ... ; k, then 1; ; k are called the rotation angles of T. T is called a regular element if the rotation angles of T are distinct from each-other. After classification of the real elements in Mo(n) we have parametrized the conjugacy classes of regular elements in Mo(n). In the parametrization, when T is not conjugate to T-1, then enlarge the group and consider the conjugacy class of T in M(n). So each such conjugacy class can be induced with a fibration structure.