

Quaternionic structure on a manifold induce c-projective structures on its totally complex submanifolds, that is a special class of torsion free complex connections. In this talk we will discuss a relation between the algebra of infinitesimal quaternionic symmetries on the manifold and the algebra of infinitesimal c-projective symmetries on its c-projective submanifold, provided that it arises as a fixed points set of an  $S^1$  action of a special kind. As both c-projective and quaternionic manifolds are examples of parabolic Cartan geometries, they admit so called gap phenomenon for the algebra of infinitesimal symmetries, which means that the maximal dimension of symmetries in the non-flat case (called the submaximal dimension) is significantly smaller than the dimension of the symmetries of the flat model. We will discuss the relations between submaximally symmetric spaces of each type.