## Abstract

Being expected as a Banach space substitute of the orthogonal projections on Hilbert spaces, generalized n-circular projections also extend the notion of generalized bicontractive projections on JB\*-triples. In this talk, we study some geometric properties of JB\*-triples related to them. In particular, we provide some structure theorems of generalized n-circular projections on an often mentioned special case of JB\*-triples, i.e., Hilbert C\*-modules over abelian C<sup>\*</sup>-algebras  $C_0(\Omega)$ . We also prove a structure theorem for generalized n-circular projections on  $C_0(\Omega)$ , where  $\Omega$  is a connected locally compact Hausdorff space, and give a complete description of these projections for n =2, 3, 4, 5. For each  $n \ge 4$  there exists a non-primitive generalized n-circular projection on  $C_0(\Omega)$ , that is, a projection which arises as an eigenprojection of a periodic isometry of period m > n.