

Hyun Ho Lee, Purdue University.

Title: Three examples of homotopy classifications of projections in corona algebra of a non-simple stable C^* -algebras

Abstract. In this talk, we will consider the question of lifting projections from the corona algebra of $I = C(X) \otimes \mathcal{K}$ to the multiplier algebra where X be $[0, 1]$, $[0, \infty)$ or $(-\infty, \infty)$. Also, we give criterions for the homotopy equivalence, unitary equivalence, and Murray-von Neumann equivalence of two projections in the corona algebra. This is a work based on the author's Ph.D. thesis under Larry Brown.