1035-46-1424 **Larry G Brown**, 150 N. University Street, West Lafayette, Wesf Lafayette, IN 47907, and **Hyun Ho Lee***, 150 N. University Street, West Lafayette, Department of Mathematics, West Lafayette, IN 47907-2067. *Homotopy Class of projections in Corona algebras of a non-simple stable C^*-algebra.* Preliminary report.

Let A be one of C^*-algebras $C([0,1]) \otimes K, C_0([0,\infty)) \otimes K$, or $C_0(-\infty,\infty) \otimes K$ where K is the C^*-algebra of compact operators in separable infinite dimensional Hilbert space. An element of the corona algebra C(A)=M(A)/A can be described as follows : Consider a finite partition of X given by partition points $x_1 < x_2 < \cdots < x_n$ (all in interior of X) and divide X into n+1 pieces $X_0, X_1, \cdots, X_n$. Then $f \in C(A)$ can be represented as $(f_0, f_1, \cdots, f_n)$ where $f_i \in C_b(X_i, B(H)_{*-strong})$ such that $f_i(x_i) - f_{i-1}(x_i) \in K$. Then a projection p in C(A), described as above, can be liftable to a projection in M(A) if and only if there are integers $l_0, l_1, \cdots, l_n$ such that 1. $l_i - l_{i-1} = -[f_i(x_i) : f_{i-1}(x_i)]$ 2. if for some x in X_i, $f_i(x)$ has finite rank, then $l_i \geq -rank(f_i(x))$.3.If for some x in X_i, $1 - f_i(x)$ has finite rank ,then $l_i \leq rank(1 - f_i(x))$ 4. If either endpoint of X_i is infinite, then $l_i = 0$ where [:] is the essential codimension is defined in Brown, Douglas, Fillmore's paper (Springer Lecture Note vol 345 P80) or is the element defined by two projections in $KK(\mathbb{C}, \mathbb{C})$. (Received September 19, 2007)