

1035-19-413

Timothy K Lance* (TLance@fmarion.edu), Department of Mathematics, Francis Marion University, P.O.Box 100547, Florence, SC 29501. *Continuous Control in Exact Non-Split Categories.*

Loday first introduced the assembly map for formulating the Novikov Conjecture in algebraic terms; showing that the assembly map is a split injection is equivalent to proving the conjecture. Later, Carlsson and Pedersen built on this work proving the conjecture in continuously and boundedly controlled K-theory for groups with "good" compactification. The classical G-theory assembly map, however, does not split in general. In this paper, I worked in the setting of K-theory with the appropriate exact non-split category which was constructed in the spirit of classical G-theory. I proved new controlled excision theorems which can be applied to the work of Carlsson and Pedersen to show the generalized assembly map is injective. This result is stronger than the previous results of Carlsson and Pedersen, justifying my use of refined techniques developed in this paper. (Received September 06, 2007)