

Lifting problems in C^* -algebras and best approximation by compact operators

Tatiana Shulman
University of Copenhagen

Thursday, October 21, 2010
007 Kemeny Hall, 4:00 pm
(Tea 3:30 pm 300 Kemeny Hall)

Abstract

Lifting problems in operator algebras can be considered as noncommutative analogue of extension problems for functions. We are going to discuss 2 problems (3, if time allows) which are formally very different, but, being reformulated as lifting problems, turn out to be similar. The first one arises in operator theory and concerns approximation of operators by compact operators. The second one arises in so called "noncommutative shape theory" and deals with noncommutative analogs of some topological notions. The third one is a question of stability of relations in C^* -algebras. This is a joint work with Terry Loring.