Lie ideals and normal subgroups in C*-algebras

Leonel Robert University of Louisiana at Lafayette

I will present various results on Lie ideals of C*-algebras. I will then discuss how these results can be combined with properties of the exponential map to obtain similar results on normal subgroups of the groups of invertibles and unitaries of a C*-algebra. I will pose some open questions along the way. I will also comment on the role played by "regularity properties"—of the kind encountered in the classification of simple nuclear C*-algebras—in these questions.