

The Mackey analogy in representation theory

Nigel Higson

Penn State University

Thursday, May 24, 2007

007 Kemeny Hall, 4:00 pm
(Tea 3:30 pm 300 Kemeny Hall)

Abstract

Through his fundamental work on induced representations, George Mackey (1916-2006) was a key contributor to the theory of infinite-dimensional unitary representations of groups. The Mackey analogy is a proposal, due to Mackey, that there ought to be a certain similarity between the unitary representations of Lie groups and the unitary representations of “contractions” of these groups. I shall try to explain this in my talk, and then explain how C^* -algebra theory and K -theory prompts us to take a new look at Mackey’s proposal.