

_c.png _c.bb _c.png height

Contribution ID: 2

Type: **not specified**

Revisiting the K -theory of CP^n from a (singular) foliation viewpoint

Thursday, 9 November 2017 09:00 (50 minutes)

This is report on work in progress with Nigel Higson. We are exploring an idea which comes from a very simple observation: The Bruhat cells of various flag manifolds are exactly the orbits of the action by a nilpotent matrix group. So one might try to use the apparatus developed for singular foliations in order to address representation theory problems. Making a start with this, we look at the case of CP^n and the action by triangular matrices. It turns out that the nilpotency of this group allows us to shed some geometric light in the well-known K -theory group of CP^n , using index theory and techniques developed with Georges Skandalis to split singularities. Using these techniques we also construct interesting K -theory elements.

Summary

Presenter: ANDROULIDAKIS, Iakovos