

EQUIVARIANT KASPAROV CATEGORY AND TT-GEOMETRY

RUBÉN MARTOS PRIETO

Abstract:

Given a locally compact group G , the corresponding equivariant Kasparov category, KK^G , is an example of tensor triangulated category. As such, one aims at applying Balmer's theory. However, these categories of C^* -algebras are not as well understood as tt-categories arising in topology or algebraic geometry. In some sense, these are pathological examples of tt-categories in view of computing their Balmer spectrum (e.g. they only have countable coproducts or they do not have suitable generation properties). In a joint work with I. Dell'Ambrogio, we have introduced a countable version of the notion of Balmer spectrum. In this setting, I will explain how we have related the Baum-Connes property for a discrete group G with the countable tt-spectrum of the G -cell algebras subcategory. Finally, I will explain how the standard Balmer's spectrum can be computed from the countable spectrum as soon as the tt-category involved is stratified.