

Nigel Higson

The Langlands classification and the Baum-Connes-Kasparov isomorphism

I shall try to describe the Baum-Connes-Kasparov isomorphism in  $C^*$ -algebra K-theory for real reductive groups from the perspective of representation theory. The original formulation involves Dirac operators on the symmetric space and index theory, but the isomorphism can be re-interpreted as a statement relating admissible representations to tempered representations. This calls to mind the Langlands classification theorem and the Oka principle from complex variables.