

# The Mackey analogy as a stratified equivalence

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The Mackey analogy refers to a correspondence between the tempered representation theory of a real reductive group  $G$  and that, much simpler, of its associated Cartan motion group  $G_0$ . It takes the form of a bijection, due to Higson in the complex case and Afgoustidis in the general case, between the tempered duals of these groups, which preserves certain invariants. With Nigel Higson and Angel Román, we constructed an embedding of  $C$ -algebras  $C^*(G_0) \rightarrow C_r^*(G)$ , which characterizes the bijection and induces the Connes-Kasparov isomorphism. After briefly reviewing the correspondence and its  $C$ -algebraic aspects, I will report on joint work with Afgoustidis on the properties of the embedding. We will see that it preserves certain natural stratifications on the tempered duals of  $G$  and  $G_0$  respectively, shedding a new light on the topological properties of the Mackey bijection.

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