Tensor category equivariant KK-theory

Yuki Arano

Toward the classification of actions of tensor categories on C*-algebras, we give a framework for the equivariant cohomology theory of C*-algebras, namely the equivariant KK-theory for C*-algebras with tensor category actions. Then we discuss how we formulate the Baum–Connes type property for tensor categories.

Bio: Yuki Arano is a Japanese mathematician. Arano earned his Ph.D. from University of Tokyo in 2017, under supervision of Yasuyuki Kawahigashi. He then got an assistant professor position at Kyoto university. He is currently an associate professor in Nagoya university since 2023. His main interest is in quantum groups and tensor categories from the operator algebraic viewpoint.