

Free entropy dimension and the orthogonal free quantum groups

by Roland Vergnioux

The von Neumann algebras associated with orthogonal free quantum groups have been intensively studied in the past decade and share many properties with free group factors. In joint work with Michael Brannan, we show that these von Neumann algebras are not isomorphic to free-group factors by using tools from free probability and a quantum analogue of the Cayley graph. I will review these tools and show how they interact to obtain the non-isomorphism result.