

Free probability and the operator algebras of free quantum groups

Michael Brannan *

mbrannan@math.tamu.edu

I will give a survey on what is known (and not known) about the C^* -algebras and von Neumann algebras of some classes of free quantum groups, including the quantum permutation groups, free orthogonal quantum groups, and free unitary quantum groups. I will emphasize how these algebras are amenable to analysis with tools from free probability theory.

*Department of Mathematics, Texas A&M University, College Station, TX 77843-3368, USA