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## Self-similar quantum groups

In this talk I will introduce the notion of self-similarity for compact quantum groups. I will start by looking at the quantum automorphism group of an infinite homogeneous rooted tree. Self-similar quantum groups are then certain quantum subgroups of these quantum automorphisms. I will then look at a class of examples called finitely-constrained self-similar quantum groups, and I will describe a subclass as quantum wreath products by subgroups of the quantum permutation group. This is based on joint work with Dave Robertson.