Self-similar quantum symmetries

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Regular rooted trees admit quantum symmetries, and I will explain the notion of a selfsimilar discrete quantum group arising this way. These quantum groups are related to certain finite quantum automata, and I will illustrate this with examples obtained as ``twists" of the Grigorchuk group and the Basilica group.

(Based on joint work in progress with N. Brownlowe, D. Robertson and M. Whittaker)