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Slices of braided multiplicative unitaries.

Braided multiplicative unitaries naturally arise in the theory of semidirect product of quantum groups. Roughly, it is a unitary operator acting on two fold tensor product of Hilbert spaces with certain properties. In this talk, we show that, under certain conditions, slices of braided multiplicative unitaries generate C^* -algebras. This is one of the key result to study braided (C^* -algebraic) quantum groups using braided multiplicative unitaries as a fundamental object, following the axiomatisation of (C^* -algebraic) quantum groups by Baaj and Skandalis, and Woronowicz. This is a joint work with S.L. Woronowicz.