ALGEBRAIC TRANSFORMATION QUANTUM GROUPOIDS

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T. Timmermann and A. Van Daele recently introduced the theory of multiplier Hopf algebroids generalizing at the same time the theory of Hopf algebroids and the theory of weak Hopf algebras. This new theory is a good framework for the construction of a new algebraic object generalizing the transformation groupoids which is inspired by the measured quantum transformation groupoids developed by M. Enock and T. Timmermann in the operator algebra framework. In my talk, I will introduce an example of a multiplier Hopf algebroid built from a braided commutative Yetter-Drinfel'd algebra over an algebraic quantum group in the sense of A. Van Daele and if I have enough time I will explain how we can pass from an algebraic transformation quantum groupoid to a quantum groupoid on the C*-algebra level.