

FREE WREATH PRODUCT QUANTUM GROUPS AND STANDARD INVARIANTS OF SUBFACTORS

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I will demonstrate that the free product construction for subfactors due to Bisch and Jones and its formulation for planar algebras can be used to give a systematic description of the free wreath product operation for compact quantum groups. In order to do, I will discuss a Tannaka-Krein style theorem which allows us to reconstruct quantum actions on finite-dimensional C^* -algebras from planar subalgebras of Jones's graph planar algebra. This is joint work with Pierre Tarrago.