

Francesco Fidaleo: Twisted C^* -tensor product

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We describe the (infinite) C^* -tensor product as the generalization of the usual tensor product and the Fermi one (that is what based on the Fermi bicharacter). After constructing the infinite chain tensor product, we show that the investigation of the set of the symmetric states (that is those invariant under the action of the finitary symmetric group), can be fruitfully carried out in only three cases. The first two are the usual tensor product and the Fermi one, generalizing the well-known De Finetti's Theorem provided, in non commutative case, by E. Stormer and FF, respectively. We have only one more (completely new) situation arising for the Klein 4-group and the associated Klein bicharacter. It is interesting to note that, while the first two examples (usual, i.e. Bose, and Fermi) have many natural applications to Quantum Physics and Probability, it is not know any reasonable application of this Klein twisted tensor product to natural models, up to now.