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Duality for convex monoids

Every C*-algebra gives rise to an effect module and a convex space of states, which are connected via Kadison duality. We explore this duality for the finite-dimensional Hopf algebras coming from finite groups. When the Hopf algebra is the function algebra or the group algebra of a finite group, the resulting state spaces form convex monoids. We will prove that both these convex monoids can be obtained from the other one by taking a coproduct of density matrices on the irreducible representations. We will also show that the same holds for a tensor product of a group and a function algebra. This is a joint work with Frank Roumen.