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Siu-Hung Ng* (rng@math.lsu.edu). *Cleft Extensions and Quotients of Twisted Doubles.*

The construction of twisted quantum doubles $D^\omega(G)$ of finite groups G was motivated by holomorphic orbifold in conformal field theory. In particular, their representation categories are modular. On the other hand, $D^\omega(G)$ can also be viewed as a cleft extension of certain quasi-Hopf algebras in the sense of Masuoka. In this talk, we will discuss a generalized construction of braided quasi-Hopf algebras $D^\omega(G, A)$ from a central subgroup A of a finite group G as a quotient of the cleft extension of some twisted quantum double of G . The modularity of $D^\omega(G, A)$ is determined by the non-degeneracy of the associated bicharacter defined on A .

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