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On the braid group representations coming from weakly group-theoretical fusion categories

Objects of braided tensor categories give rise to representations of braid groups. These representations are used to construct invariants of knots and links and to study topological models for quantum computing. One would like to understand a relation between these representations and the structure of the original category. We prove that braid group representations coming from weakly group-theoretical braided fusion categories have finite images. This extends the finiteness result of Etingof, Rowell, and Witherspoon for group-theoretical categories. We explicitly compute the braid group images coming from Drinfeld doubles of dihedral groups. This is a report on the joint work with Jason Green.