

1030-16-23

Deepak Naidu* (dnaidu@unh.edu), Department of Mathematics and Statistics, Kingsbury Hall, Durham, NH 03824, and **Dmitri Nikshych**. *Lagrangian subcategories and braided tensor equivalences of twisted quantum doubles of finite groups.*

In this talk, we present a classification of Lagrangian subcategories of the representation category of a twisted quantum double of a finite group. In view of results of arxiv:0704.0195v2 [math.QA] this gives a complete description of all braided tensor equivalent pairs of twisted quantum doubles of finite groups. We also establish a canonical bijection between Lagrangian subcategories of the representation category of a twisted quantum double of a finite group G and module categories over the category of twisted G -graded vector spaces such that the dual fusion category is pointed. As a consequence, we obtain that two group-theoretical fusion categories are weakly Morita equivalent if and only if their centers are equivalent as braided tensor categories. Preprint: arXiv:0705.0665v1 [math.QA]. (Received June 17, 2007)