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Title: Stability of the superselection sectors of Kitaev's abelian quantum double models

Abstract: Kitaev's quantum double models provide a rich class of examples of two-dimensional lattice systems with topological order in the ground states and a spectrum described by anyonic elementary excitations. The infinite volume ground states of the abelian quantum double models come in a number of equivalence classes called superselection sectors. We prove that the superselection structure remains unchanged under uniformly small perturbations of the quantum double Hamiltonians. (joint work with Matthew Cha and Pieter Naaijken)