**Momentum polarization of non-Abelian topologically ordered states**

YI ZHANG, XIAO-LIANG QI, Stanford University — We study momentum polarization of non-Abelian topologically ordered states for the Gutzwiller projected Chern insulator wave function with Chern number $C=2$. The resulting quasiparticle topological spin and edge central charge confirm the field theory description of an SU(2) gauge field coupled to $\nu = 2$ fermions and rule out other candidate theories. We also discuss characteristic differences and the quantum phase transition between this non-Abelian topological phase and an Abelian topological phase described by the projected wave function of two $C=1$ Chern insulators.

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