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Effect of Landau Level Mixing on Braiding Statistics STEVEN H.

SIMON, Alcatel-Lucent Bell Labs — We examine the effect of Landau level mixing on the braiding statistics of quasiparticles of abelian and nonabelian quantum Hall states. While path dependent geometric phases can perturb the abelian part of the statistics, we find that the nonabelian properties remain unchanged to an accuracy that is exponentially small in the distance between quasiparticles.

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