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12/5 and 13/5 fractional quantum Hall states and Landau level mixing KIRYL PAKROUSKI, Theoretische Physik, ETH Zurich, Zurich 8093, Switzerland, MICHAEL PETERSON, Physics Astronomy, California State University, Long Beach, CA, US, YANG-LE WU, Joint Quantum Institute and Condensed Matter Theory Center, Department of Physics, University of Maryland, College Park, Maryland 20742, US, MATTHIAS TROYER, Theoretische Physik, ETH Zurich, Zurich 8093, Switzerland — We use exact diagonalization to study the way Landau level mixing breaks the particle-hole symmetry between the 12/5 and 13/5 fractional quantum Hall states in GaAs. We discuss the possible relationship between our observations and the absence of the 13/5 state in experiment.

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