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A Numerical Study of 1/4 filling in the N=2 Landau Level BARRY FRIEDMAN, MOSES MARCHANTE — Recently, it has been proposed that anisotropic Wigner crystals of electrons, with 1 electron per lattice site, have in certain circumstances, lower energies then the 2 electron bubble state or isotropic Wigner crystals. Using direct diagonalization and the density matrix renormalization group (dmrg) we have re examined 1/4 filling in the N=2 Landau level. Preliminary results indicate that the ground state consists of the 2 electron bubble state. Implementation of the dmrg, for quantum Hall systems, will also be discussed.

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