1106-81-799 **Xingshan Cui*** (xingshan@math.ucsb.edu) and **Zhenghan Wang**. *Universal Quantum Computation with Metaplectic Anyons.*

We show that braidings of the metaplectic anyons X_ϵ in $SO(3)_2 = SU(2)_4$ with their total charge equal to the metaplectic mode Y supplemented with measurements of the total charge of two metaplectic anyons are universal for quantum computation. We conjecture that similar universal anyonic computing models can be constructed for all metaplectic anyon systems $SO(p)_2$ for any odd prime $p \geq 5$. In order to prove universality, we find new conceptually appealing universal gate sets for qutrits and qupits. (Received September 06, 2014)