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**Louis H. Kauffman\*** (kauffman@uic.edu), 5530 South Shore Drive, Apartment 7C, Chicago, IL 60637-1946. *Braids and Clifford Algebras*. Preliminary report.

This talk will discuss braid group representations naturally associated with Clifford algebras with  $n$  generators  $a_1, \dots, a_n$  such that  $(a_i)^2 = 1$  and every pair of generators anti-commutes. The  $a_i$  are called Majorana operators in physics and a pair of Majorana operators  $\{a, b\}$  can be combined as  $(a + ib)/\sqrt{2}$  and  $(a - ib)/\sqrt{2}$  to form the usual operator algebra for a fermion. The braid group representations that we discuss are of interest in their own right, and they are of potential use if physical phenomena corresponding to the Majorana operators are discovered. (Received January 15, 2015)