1033-55-136   **Christopher L. Douglas*** (`cdouglas@math.berkeley.edu`), **Arthur Bartels** and **Andre Henriques**. *Clifford Algebras and Conformal Nets.* Preliminary report.

Real K-Theory is 8-periodic. This periodicity can be seen algebraically from the periodicity of Clifford algebras: Clifford algebras form a 2-category, and in that 2-category, the generator Cl(1) has order 8. The analogous algebraic objects for elliptic cohomology ought to form a 3-category. We introduce a candidate such 3-category whose objects are invertible conformal nets. We show that the generating net, the net of free fermions, will have order at least 24. (Received September 08, 2007)