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Christopher L. Douglas* (cdouglas@math.berkeley.edu), **Arthur Bartels** and **Andre Henriques**. *Morita-Invertible 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 in the sense that $Cl(1)^8$ is Morita equivalent to the unit algebra. The analogous algebraic objects for elliptic cohomology ought to form a 3-category. We introduce a candidate such 3-category whose objects are conformal nets that are invertible up to Morita equivalence. We describe an argument showing that the generating net, the net of free fermions, will have order at least 24. (Received September 08, 2007)