1135-81-2035 **James Tener***, Department of Mathematics, University of California, Santa Barbara, CA 93103.

*The geometry of conformal nets.* Preliminary report.

Conformal nets are a mathematical axiomatization of 1+1 dimensional chiral conformal field theories, expressed in terms of von Neumann algebras of local observables. One advantage of studying topics in mathematical physics is that one may compare different mathematical formulations of the same physical phenomena, and learn new things about mathematics in the process. In this talk, I will discuss the relationship between conformal nets and the more geometric notions of vertex operator algebras and Segal CFT. In doing so I will describe how the von Neumann algebras in question have a geometric description. Part of the talk will be based on joint work with André Henriques. (Received September 25, 2017)