1134-46-276 **James Tener***, UC Santa Barbara, Department of Mathematics, Santa Barbara, CA 93106. *A geometric approach to constructing conformal nets.*

Conformal nets and vertex operator algebras are distinct mathematical axiomatizations of roughly the same physical idea: a two-dimensional chiral conformal field theory. In this talk I will present recent work in which local operators in conformal nets are realized as "boundary values" of vertex operators. This construction exhibits many operator algebraic features of conformal nets (e.g. subfactors, their Jones indices, and their fusion rules) in terms of the geometry of vertex operator algebras. We will discuss how this allows one to extend Wassermann's approach to showing Jones-Wassermann subfactors have finite index to a broader class of examples. (Received September 09, 2017)