1151-17-106   **Juan J. Villarreal*** (`jjvillarrealm@vcu.edu`), Richmond, VA. *Sheaves of vertex algebras and Elliptic genera.* Preliminary report.

We introduce a finite dimensional sheaves of operators and an infinite dimensional sheaves of operators, we use these sheaves of operators to obtain Atiyah Singer index formulas and Elliptic generates formulas, respectively. Finally, we work on a generalization of the Virasoro algebra using the curvature of the manifold, we want to use these algebras to stablish some topological obstructions. (Received August 12, 2019)