Contribution Title:

Authors: Presenting author: Affilation: E-mail: Invited speaker: YRS seminar: OPERATOR ALGEBRAS AND NONCOMMUTATIVE GEOMETRIC ASPECTS IN CONFORMAL FIELD THE-ORY R. Longo Longo R. Università di Roma Tor Vergata longo@mat.uniroma2.it Plenary NO

The Operator Algebraic approach to Conformal Field Theory has been particularly fruitful in recent years (leading for example to the classification of all local conformal nets on the circle with central charge c<1, jointly with Y. Kawahigashi). On the other hand the Operator Algebraic viewpoint offers a natural perspective for a Noncommutative Geometric context within Conformal Field Theory. One basic point here is to uncover the relevant structures. In this talk I will explain some of the basic steps in this "Noncommutative Geometrization program" up to the recent construction of a spectral triple associated with certain Ramond representations of the Supersymmetric Virasoro net. So Alain Connes framework enters into play (joint work with S. Carpi, Y. Kawahigashi, R. Hillier).