

Superconformal field theory and noncommutative geometry

Abstract:

We present an operator algebraic approach to chiral conformal field theory. Based on an analogy between the Laplacian and the conformal Hamiltonian, we present families of infinite dimensional "noncommutative manifolds" arising from super Virasoro algebras. We study their cohomological aspects from a viewpoint of noncommutative geometry. No knowledge on conformal field theory or noncommutative geometry is assumed.

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