

1018-17-269

**Elena Poletaeva\*** ([elena@math.ucr.edu](mailto:elena@math.ucr.edu)), Department of Mathematics, University of California, Riverside, CA 92521. *Superconformal algebras and some related topics.*

Superextensions of the Virasoro algebra are called superconformal algebras. They play an important role in the string theory and conformal field theory. We obtain new realizations of exceptional superconformal algebras as Lie subalgebras of pseudodifferential symbols and as matrices over a Weyl algebra. This allows to construct new representations of these superconformal algebras. (Received March 08, 2006)