1009-17-104   **Alexander Retakh***, Department of Mathematics, University of Texas at Arlington, Arlington, TX 76019. *Modular conformal algebras.*

Conformal algebras provide a formal language for the theory of vertex algebras as well as a very nice way to describe a rich class of infinite-dimensional Lie algebras. In general, classifying conformal algebras and their representations turns out to be a very difficult task. I will define modular conformal algebras (i.e. an analog of conformal algebras in prime characteristic) and explain how they can serve as a "testing ground" for the case of zero characteristic. (Received August 09, 2005)