

MATHEMATICS DEPARTMENT  
North Carolina State University

ALGEBRA SEMINAR

Wednesday, November 17, 2004

Professor Alexander Retakh

MIT

Structure Theory and Representations of  
Conformal Algebras

**ABSTRACT:** Conformal superalgebras provide rigorous algebraic formalism for the theory of vertex algebras and, more generally, conformal field theory. In particular, they are closely related (and generalize) the superconformal algebras known to physicists.

I will discuss two questions: first, I will state the recently obtained classification of finite conformal superalgebras and explain what makes some of them suitable for physical theories. Then I will describe the general set-up for “conformal representation theory” and related combinatorial and algebraic problems.

2:35 - 3:25pm HA 335

Faculty and Students are invited to attend.