



Algebra/Topology Seminar

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INVARIANT SUBALGEBRAS OF VERTEX ALGEBRAS

Thursday, September 20, 2012
1:15 p.m. in ES-143

ABSTRACT. Given a vertex algebra A and a reductive group G of automorphisms of A , we discuss the question of when the invariant subalgebra A^G is strongly finitely generated. This is an analogue of Hilbert's theorem on the finite generation of classical invariant rings. We prove that this holds for any G when A is a free field algebra (either a bc system, $\beta\gamma$ system, or Heisenberg algebra), and when A is the universal affine vertex algebra associated to a simple, finite-dimensional Lie algebra at generic level.