

Permutation Orbifolds of Heisenberg Vertex Operator Algebras

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Vertex algebras are an important class of mathematical objects that serve as a bridge between seemingly disparate areas of mathematics and quantum physics—from number theory to string theory. An important family of vertex algebras are the “free-field” vertex algebras, which are in some ways “quantum” versions of polynomials. This project will investigate the subspaces of a certain “free-field” vertex algebra that is fixed under the action of a permutation group.

