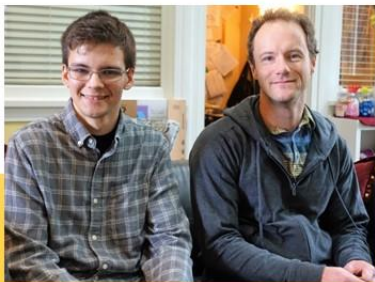


“Finite Group Invariants of the rank 2 Heisenberg Vertex Algebra”
Jude Quintero '20; Michael Penn, *Assistant Professor, Mathematics*



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 finite group.