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Jude L Quintero* (jlquintero@randolphcollege.edu) and **Michael Penn**

(mpenn@randolphcollege.edu). *Finite Group Orbifolds of the Rank 2 Heisenberg Vertex Algebra.*

Finding invariant subalgebras known as orbifolds is an important technique for constructing new vertex operator algebras. We apply classical invariant theory, similar to the approach of A. Linshaw, to the Rank 2 Heisenberg Vertex Algebra, $\mathcal{H}(2)$. Using the facts that the full automorphism group of $\mathcal{H}(2)$ is the orthogonal group $\mathcal{O}(2)$, and all finite subgroups of $\mathcal{O}(2)$ are cyclic or dihedral, we classify all finite group orbifolds of $\mathcal{H}(2)$. (Received September 24, 2018)