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Luigi Ferraro, Ellen Kirkman and W. Frank Moore* (moorewf@wfu.edu), 1834 Wake Forest Road, 127 Manchester Hall, Winston-Salem, NC 27106, and **Robert Won.** *Hopf algebra actions on some AS-regular algebras of small dimension.*

The classical Chevalley-Shephard-Todd Theorem gives a characterization of when a group acting linearly on the commutative polynomial ring has a ring of invariants that is isomorphic to a polynomial ring. Understanding when group actions (or more generally, Hopf actions) on AS-regular algebras give AS-regular invariant rings has proven to be a difficult problem. In this preliminary report, we provide some new examples of Hopf actions of the algebras \mathcal{A}_{4m} and \mathcal{B}_{4m} of Masuoka, and the algebras H_{2n^2} of Pansera on some AS-regular algebras such that the ring of invariants is also AS-regular. (Received February 06, 2018)