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Jason Gaddis, Ellen Kirkman and **W. Frank Moore*** (moorewf@wfu.edu), 127 Manchester Hall, PO Box 7388, Winston-Salem, NC 27109, and **Robert Won**. *Auslander's Theorem for permutation actions on noncommutative algebras.*

When $A = k[x_1, \dots, x_n]$ and G is a small subgroup of $\mathrm{GL}_n(k)$, Auslander's Theorem says that the skew group algebra $A\#G$ is isomorphic to $\mathrm{End}_{A^G}(A)$ as graded algebras. We prove a generalization of Auslander's Theorem for permutation actions on (-1) -skew polynomial rings, (-1) -quantum Weyl algebras, three-dimensional Sklyanin algebras, and a certain homogeneous down-up algebra. We also show that certain fixed rings A^G are graded isolated singularities in the sense of Ueyama. (Received July 17, 2017)