1035-16-1192 **Ellen E. Kirkman** and **James Kuzmanovich*** (kuz@wfu.edu), Department of Mathematics, Wake Forest University, Winston-Salem, NC 27109, and **James J Zhang**. *A Shephard-Todd-Chevalley Theorem for Skew Polynomial Rings.* Preliminary report.

The Shephard-Todd-Chevalley Theorems states that if G is a finite group of graded automorphisms of a polynomial ring, then the fixed ring is again a polynomial ring if and only if G is generated by reflections. After suitably modifying the definition of a reflection, the authors prove a Shephard-Todd-Chevalley theorem for skew polynomial rings. They also show that such a theorem holds whenever G is a finite Abelian group of graded automorphisms of a quantum polynomial ring. (Received September 19, 2007)