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Philadelphia, PA 19122, and **Linhong Wang*** (`lwang@selu.edu`), Department of Mathematics,
SLU10687, Southeastern Louisiana University, Hammond, LA 70402. *Goldie ranks of skew power
series rings of automorphic type.* Preliminary report.

Let A be a noetherian ring equipped with an automorphism α, and let $B := A[[y; \alpha]]$ denote the corresponding skew power series ring. We prove that A is semiprime if and only if B is semiprime. Next, assuming A is semiprime, we prove that the Goldie rank of B is equal to the Goldie rank of A. The same conclusions hold true when B is replaced by the skew Laurent series ring $A[[y^{\pm 1}; \alpha]]$. (Received August 24, 2009)

1