

1025-30-57

**Joseph B. Miles\*** ([joe@math.uiuc.edu](mailto:joe@math.uiuc.edu)), Department of Mathematics, University of Illinois, 1409 W. Green Street, Urbana, IL 61801. *On meromorphic functions of order slightly greater than one.*

If  $f$  is a meromorphic function on the plane, let

$$K(f) = \limsup_{r \rightarrow \infty} \frac{N(r, 0, f) + N(r, \infty, f)}{T(r, f)},$$

where we use standard functionals from Nevanlinna theory. It has long been conjectured for all meromorphic functions of nonintegral order  $\rho$  that  $K(f) \geq K(L_\rho)$ , where the entire function  $L_\rho$  is the canonical product with negative zeros satisfying  $n(r, 0, L_\rho) = [r^\rho]$ . This conjecture has been established only for  $\rho < 1$ . We show the existence of  $\rho_0 > 1$  such that if  $1 < \rho < \rho_0$  then  $K(f) \geq K(L_\rho)$  for all meromorphic  $f$  of order  $\rho$  satisfying  $N(r, 0, f) + N(r, \infty, f) \sim r^\rho$  (Received January 11, 2007)