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**Linda R. Sons\*** ([sons@math.niu.edu](mailto:sons@math.niu.edu)), Dept. Mathematical Sciences, Northern Illinois University, DeKalb, IL 60115. *A special class of functions in the unit disc as coefficients for differential equations.* Preliminary report.

Let  $f$  be an analytic function in the unit disc  $D$ . If  $T$  denotes the Nevanlinna characteristic function, let  $a(f)$  be the limit superior of  $T(r,f)/(-\log(1-r))$  as  $r$  approaches one. Let  $S$  be the class of analytic functions in  $D$  for which  $a(f)$  is finite, but  $a(g)$  is infinite where  $g' = f$ . We explore characteristics of the solutions of differential equations in  $D$  for which functions in  $S$  are coefficients. (Received February 02, 2009)