962-34-693

Janne Heittokangas (heittoka@cc.joensuu.fi), University of Joensuu, Department of Mathematics, P.O. Box 111, FIN-80101 Joensuu, Finland. On the quotients and products of two linearly independent solutions of f'' + A(z)f = 0 in the unit disc.

Let  $\{f_1, f_2\}$  denote a fundamental system of analytic solutions of f'' + A(z)f = 0, where A(z) is analytic in the unit disc. Properties of the quotient  $F = f_1/f_2$  and the product  $E = f_1f_2$  are used to obtain information on A(z) and vice versa. Some well-known results from the theory of oscillation are applied in the reasoning. (Received September 21, 2000)