

Abstract.

We consider the problem of minimizing the A^2 area integral for non-vanishing functions whose first two Taylor coefficients are given. We show that, if f is the extremal function, then, under some regularity conditions, there is a non-linear differential equation between f and an associated analytic function K . This leads to some relationships between the area moments and the circle moments of $|f|^2$ and from these we can find f and calculate the desired minimum value.