

Zbl 578.30018

Edrei, A.; Erdős, Paul

Entire functions bounded outside a finite area. (In English)

Acta Math. Hung. **45**, 367-376 (1985). [0236-5294]

Problem: Under what circumstances can it happen that for an entire function $f(z)$ the 2-dimensional Lebesgue measure of $\{z : |f(z)| > B\}$ is finite for some positive B ? The authors answer this problem completely by proving that this can only happen, if

$$\liminf_{r \rightarrow \infty} \log \log \log M(r) / \log r \geq 2.$$

An example shows that 2 can not be replaced by a larger number.

W.H.J.Fuchs

Classification:

30D20 General theory of entire functions

30D35 Distribution of values (one complex variable)

Keywords:

Lebesgue measure