

On a Blaschke-type condition for analytic and subharmonic functions with a set of singularities on the boundary.

We consider analytic and subharmonic functions in the unit disc growing near a subset of the boundary and obtain an analog of the Blaschke-type bounds for their zeros or, respectively, their Riesz measures. This analog depends on Minkowski's dimension of the subset. The optimal character of such estimates is demonstrated.

Next, we introduce a notion of r -convexity for subsets of the complex plane and investigate analytic and subharmonic functions that grow near the boundary in unbounded domains with r -convex compact complement. We obtain the Blaschke-type bounds for zeros and, respectively, for Riesz measure in such domains as well.