

APPROXIMATION PROPERTIES OF PARTIAL SUMS WITH RESTRICTED COEFFICIENTS

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ABSTRACT. Let $S_n(f)$ denote the n -th partial sum of a Taylor series $f(z) = \sum_{n=0}^{\infty} a_n z^n$ with radius of convergence 1. We investigate the behavior of the sequence $(S_n(f))$ on sets lying outside the open unit disk. For instance, assuming that the Taylor coefficients a_n are all unimodular we shall see that the sequence $(S_n(f))$ exhibits interesting limiting behavior only on sets lying in the annulus $\{z \in \mathbb{C} : 1 \leq |z| < 2\}$.

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