



Math for the people, by the people.

pluripolar set

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Definition. Let $G \subset \mathbb{C}^n$ and let $f: G \rightarrow \mathbb{R} \cup \{-\infty\}$ be a plurisubharmonic function which is not identically $-\infty$. The set $\mathcal{P} := \{z \in G \mid f(z) = -\infty\}$ is called a *pluripolar set*.

If f is a holomorphic function then $\log|f|$ is a plurisubharmonic function. The zero set of f is then a pluripolar set.

References

- [1] Steven G. Krantz. , AMS Chelsea Publishing, Providence, Rhode Island, 1992.