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logarithmically convex set

Canonical name	LogarithmicallyConvexSet
Date of creation	2013-03-22 14:29:32
Last modified on	2013-03-22 14:29:32
Owner	jirka (4157)
Last modified by	jirka (4157)
Numerical id	5
Author	jirka (4157)
Entry type	Definition
Classification	msc 32A07

Suppose $G \subset \mathbb{C}^n$, then we define

$$\log\|G\| := \{(\log|z_1|, \dots, \log|z_n|) \in \mathbb{R}^n \mid (z_1, \dots, z_n) \in G\}.$$

Definition. We say $G \subset \mathbb{C}^n$ is a *logarithmically convex set* if $\log\|G\| \subset \mathbb{R}^n$ is a convex set.

References

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