

Plurisubharmonic functions with subharmonic singularities (based on a paper by E. Chirka)

The following theorem due to Chirka was presented:

Let Ω be a domain in \mathbb{C}^n , $n \geq 2$ and Γ be a real $(2n - 1)$ -dimensional hypersurface of class \mathcal{C}^1 in Ω . Let u be a subharmonic function in Ω which is plurisubharmonic in $\Omega \setminus \Gamma$. Then u is plurisubharmonic throughout Ω .

Some connections with the Poincare-Lelong equation and extension problems connected with positive line bundles were also discussed.