PLURIHARMONICITY IN THE SHEAF OF COMPLEX LINES

Nilufar Kuronboevna Khaknazarova The Headscientific-methodical center under MHSSE THE REPUBLIC OF UZBEKISTAN

ABSTRACT

In this article, we prove an analog of Forelli's Theorem for pluriharmonic functions, Theorem 1. Let D be a complete circular domain in C^n and the function $U, D \rightarrow R$, defined in D, satisfies the following conditions:

- 1) U M- subharmonic somewhere, $U \in Msh\{0\}$
- 2) For each fixed $z \in D$ the function $U(\lambda z)$ is harmonic in the circle $\left\{\lambda \in \mathbb{C}^n : \lambda z \in D\right\}$.

Then the function U is pluriharmonic in D.

Keywords: M – sub harmonic functions, plurisubharmonic functions, holomorphic functions, harmonic functions, entire circular domain.