Povzetek : V prvem delu so opisani razni odnosi med holomorfnimi preslikavami iz $\mathbb{C}^n$ v $\mathbb{C}^n$ in števnimi množicami v $\mathbb{C}^n$. Drugi del se ukvarja z vprašanjem, kakšne so lahko (bi)holomorfne slike prostora $\mathbb{C}^n$. Konstruirana je nedegenerirana preslikava $F : \mathbb{C}^n \to \mathbb{C}^n$, $JF \equiv 1$, taka, da ima $F(\mathbb{C}^n)$ končen volumen. Predstavljena je konstrukcija Fatou-Bieberbachovih območij s pomočjo avtomorfizmov in njihovih negibnih točk.

Ključne besede : interpolacija z imerzijami, pohlevne množice, neizogibljive množice, strigi, Fatou-Bieberbachova območja

Abstract : In first part various relations between holomorphic mappings from $\mathbb{C}^n$ to $\mathbb{C}^n$ and countable sets in $\mathbb{C}^n$ are described. Second part deals with properties of (bi)holomorphic images of $\mathbb{C}^n$. A nondegenerate map $F : \mathbb{C}^n \to \mathbb{C}^n$, $JF \equiv 1$ is constructed, such that $F(\mathbb{C}^n)$ has finite volume. Construction of Fatou-Bieberbach domain using automorphisms and theirs fixed points is described.

Keywords : immersion interpolation, tame sets, unavoidable sets, shears, Fatou-Bieberbach regions

Literatura

[1] J.-P. Rosay, W.Rudin, *Holomorphic Maps from* $\mathbb{C}^n \to \mathbb{C}^n$, Trans. Amer. Math. Soc. **310**,1988,47-86.

[2] R. Michael Range, *Holomorphic Functions and Integral Representations in Several Complex Variables*, Springer-Verlag, 1986.

[3] Lars Hörmander, *An Introduction to Complex Analysis in Several Variables*, 3 ed., 1990

[4] John B. Conway, *Functions of One Complex Variable*, Springer Verlag, 1973

[5] J.-P. Rosay, W.Rudin, *Arakelian's approximation theorem*, Amer. Math. Monthly, **96**, 1989, no.5 , 432-434 .

[6] W.Rudin, *Real and Complex Analysis*, Mc Graw-Hill, 1986

[7] E.L.Stout, *The theory of uniform algebras*, Bogden and Quigley, 1971