Helsinki Analysis Seminar, 2014-09-22 Shaolin Chen, Hengyang Normal University Abstract

DISTORTION AND COVERING THEOREMS OF PLURIHARMONIC MAPPINGS

In this presentation, the distortion and covering theorems on some classes of pluriharmonic mappings will be investigated (cf. [CPV]). The obtained results are the generalization of the corresponding results of [PS, S1, S2]. This presentation is based on the joint research with S. Ponnusamy (IITM and Indian Statistical Institute Chennai Centre) and V. V. Starkov (Faculty of mathematics, Petrozavodsk State University, Russia).

References

[CPV] SH. CHEN, S. PONNUSAMY AND X. WANG, Covering and distortion theorems of pluriharmonic mappings, Preprint.

[PS] J. A. PFALTZGRAFF AND T. J. SUFFRIDGE, Norm order and geometric properties of holomorphic mappings in \mathbb{C}^n , J. Anal. Math., 82(2000), 285–313.

[S1] V. V. STARKOV, Harmonic locally quasiconformal mappings, Annales Universitatis Mariae Curie-Sklodowska. Sectio A. Mathematica, 14(1995), 183–197.

[S2] V. V. STARKOV, Univalence disks of harmonic locally quasiconformal mappings and harmonic Bloch functions, *Siberian Math. J.* **38**(1997), 791–800.