BERGISCHE UNIVERSITÄT
WUPPERTAL
Gaußstraße 20
42119 Wuppertal

Fachbereich C, Mathematik
und Naturwissenschaften

Prof. Dr. Nikolay Shcherbina

Telefon: (0202) 439-3041
Raum: G.15.19

Im Rahmen der

AG Komplexe Analysis

finden am **Dienstag, dem 03.02.2015, in Raum G.15.25** folgende Vorträge statt:

14:15 – 15:45 Uhr, **Positivity and completeness of the Bergman metric for unbounded domains in $\mathbb{C}^n$**

(Prof. Kang-Tae Kim, POSTECH, Korea)

Abstract: The Bergman metric is the invariant metric constructed upon the Bergman kernel function, on bounded domains. However, if the domain is unbounded it is usually not obvious at all if the Bergman metric is even positive (i.e., positive-definite). Even if the Bergman metric is complete, its completeness is another matter. In this talk, I would like to present a method that can resolve these issues for several collections of unbounded domains.

16:00 – 17:30 Uhr, **Noncritical holomorphic functions on Stein spaces**

(Prof. Franc Forstnerič, University of Ljubljana)

Abstract: We prove that every reduced Stein space admits a holomorphic function without critical points. Furthermore, any closed discrete subset of such a space is the critical locus of a holomorphic function. We also show that for every complex analytic stratification with nonsingular strata on a reduced Stein space there exists a holomorphic function whose restriction to every stratum is noncritical. These result also provide some information on critical loci of holomorphic functions on desingularizations of Stein spaces. In particular, every 1-convex manifold admits a holomorphic function that is noncritical outside the exceptional variety.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina