BERGISCHE UNIVERSITÄT
WUPPERTAL
Gaußstraße 20
42119 Wuppertal

Fakultät für Mathematik
und Naturwissenschaften

Prof. Dr. Nikolay Shcherbina

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

Im Rahmen der

AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

Visibility spaces for the Kobayashi distance and applications
(Prof. Gautam Bharali, Indian Institute of Science, Bangalore)

am **Dienstag, den 08.10.2019, um 16 Uhr c.t. in G.15.25**.

Abstract: Given a metric space, there are several notions of it being negatively curved. In this talk, we single out a weak notion of negative curvature (which, in fact, is a consequence of negative curvature in the Riemannian category) that turns out to be very useful in proving results about holomorphic maps. This property is a form of visibility, the underlying metric spaces being bounded domains in $\mathbb{C}^n$ equipped with the Kobayashi distance. In this talk, we shall present a general quantitative condition for a domain to be a visibility space in the sense alluded to above. A class of domains known as Goldilocks domains – introduced in joint work with Andrew Zimmer in 2017 – possess this visibility property. Visibility domains form a broad class of domains that includes, for instance, all pseudoconvex domains of finite type. Throughout the talk, we shall refer to the Wolff-Denjoy theorem – which was previously known to hold true on certain convex domains and on strongly pseudoconvex domains – as a framing device for the sort of phenomena that extend to visibility domains. We shall also discuss methods for determining when a domain is a visibility space and for constructing new examples with rough boundaries. This is joint work with Andrew Zimmer and Anwoy Maitra.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina