

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 folgender Vortragsreihe ein:

### Curvature properties of Kähler metrics on pseudoconvex domains

(**Prof. Hervé Gaussier, Université Grenoble Alpes, France**)

Die Vorträge finden statt in der Zeit **15.04.2019 bis 17.04.2019**.

**Lecture 1 (Monday, 16:00-17:00, G.15.25): Generalities about invariant metrics and examples.** We will present the Poincaré metric, some generalizations, and explain on that examples the notions we will consider in the next lectures: metric properties, curvature properties.

**Lecture 2 (Monday, 17:00-18:00, G.15.25): Gromov hyperbolicity and the geodesic stability Theorem.** We will explain how real geodesics and quasi-geodesics are related in Gromov hyperbolic spaces and, conversely, how they characterize the Gromov hyperbolicity. As an example, we will consider the case of convex domains in  $\mathbb{C}^n$ .

**Lectures 3 & 4 (Tuesday, 16:00-18:00, G.15.25)** We will define curvature notions for Kähler metrics and present different classical results about the existence of metrics with negative pinched holomorphic bisectional curvatures in domains of  $\mathbb{C}^n$ : polydisc, strongly pseudoconvex domains.

**Lectures 5 & 6 (Wednesday, 16:00-18:00, G.16.09)** We will continue the curvature study, presenting recent results concerning the Bergman and the Kähler-Einstein metrics curvature behaviour in domains.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina