

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:

Volume Approximations in Several Complex Variables

Professor Purvi Gupta, Indian Institute of Science (Bangalore)

am Dienstag, den 13.09.2022, um 16 Uhr c.t. in Hörsaal 8.

Abstract: Convex bodies in \mathbb{R}^n can be approximated (from the inside or outside) by many families of special convex bodies such as inscribed and circumscribed polyhedra, convex floating bodies, illumination bodies, etc. In many of these cases, the asymptotic analysis of the approximation error — measured in terms of the volume of the gaps — has yielded equiaffine-invariant combinatorial and geometric data associated to the underlying convex body. After discussing a few of these background results, we will discuss complex analogues of such volume approximations. Specifically, we will elaborate on two results of this kind in \mathbb{C}^n : one for strongly \mathbb{C} -convex domains, and the other for pseudoconvex tube domains.