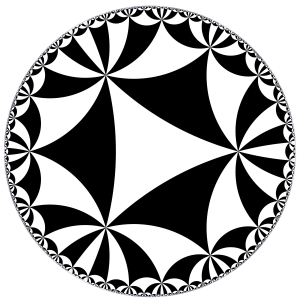
Universität Würzburg
Institut für Mathematik
Lehrstuhl Mathematik IV
Komplexe Analysis
Prof. Dr. Oliver Roth



Oberseminar Funktionentheorie

Freitag, 19. November 2021, 10.00 Uhr

Dr. Maria Kourou

(University of Würzburg, Germany)

Backward Orbits of Semigroups of Holomorphic Functions and Conformal Invariant Quantities

Abstract.
Abstract: Let $(\phi_t)_{t\geq 0}$ be a semigroup of holomorphic functions in the unit disk $\mathbb{D}$ and K a compact subset of $\mathbb{D}$. We investigate the conditions under which the backward orbit of K under the semigroup exists. Subsequently, the geometric characteristics, as well as, potential theoretic quantities for the backward orbit of K are examined. Results are obtained concerning the asymptotic behavior of its hyperbolic area, diameter and capacity, as well as, the harmonic measure defined on its complement in the unit disk. This is a joint work with Konstantinos Zarvalis.

Alle Interessenten sind herzlich eingeladen!