

Positive harmonic functions on Denjoy-type domains

Joanna Pres

University College Dublin

Abstract

This talk concerns positive harmonic functions on domains that are complementary to a subset of a cylindrical surface. It characterizes those domains that admit minimal harmonic functions with exponential growth. Such domains can be regarded as cylindrical analogues of Denjoy domains, which have been widely studied. Our results have applications (via inversion) to the study of irregular boundary points and approximation properties of positive harmonic functions. (Joint work with Marius Ghergu)