

Harmonic functions on compact sets

Tony Perkins

Syracuse University

Abstract

In our talk we will discuss the space of harmonic functions on compact sets defined as uniform limits of harmonic functions on neighborhoods. Two problems are of our interest. The first one is the description of this space similar to the description of this space on closures of regular domains. The second one is the extension of the Szpilrajn-Cole-Ransford result describing Suslin functions with the subaveraging property relative to Jensen measures. As we will explain both problems require an introduction of a new metric on the compact set and a new notion of capacity.