



Analysis Seminar

Title: Complex approximation: from one to several variables

Speaker: Myrto Manolaki

Date: Tue 17th November 2020 at 4:00PM

Location: Online

Abstract: In one complex variable, approximation theory is well developed. For example, the celebrated theorem of Mergelyan states that if K is a compact subset of the complex plane with connected complement, then every continuous function on K which is holomorphic on its interior can be uniformly approximated on K by polynomials. In this talk, we will discuss what happens in several complex variables, where the situation is far from being understood. In particular, I will introduce a natural function algebra which allows us to obtain new Mergelyan-type theorems. Moreover, I will present a counterexample to a classical result from 1969 that motivated the introduction of this new function algebra. (Joint work with J. Falco, P. Gauthier and V. Nestoridis.)

<https://ucd-ie.zoom.us/j/63750217567?pwd=YlNDR2FJUUp1NkFLMjB3UWh5ZGdIQT09>