



Analysis Seminar

Title: Overconvergence Properties of Dirichlet series

Speaker: Mayya Golitsyna (UCD)

Date: Tue 16th October 2018 at 3:00PM

Location: Seminar Room SCN 1.25

Abstract: In this talk we discuss the properties of the subsequences of the partial sums of general Dirichlet series. It is known that a Dirichlet series of the form $\sum_{j=0}^{\infty} a_j e^{-\lambda_j s}$ either diverges, converges on some half-plane $\{\operatorname{Re}(s) > c\}$ to a holomorphic function f or converges on the whole complex plane. In case where the series converges on a half-plane it is possible that the function f has a holomorphic extension to a larger domain that strictly contains the half-plane. We will give sufficient conditions for a subsequence of partial sums of the series to converge at every regular point of f . We apply potential theoretic techniques to prove the results.