



UCD School of
Mathematics and Statistics

University College Dublin
Belfield, Dublin 4, Ireland

Tel +353 1 716 2580
Fax +353 1 716 1196

Scoil na
Matamaitice agus na Staitisticí UCD

An Coláiste Ollscoile, Baile Átha Cliath
Belfield, Baile Átha Cliath 4, Éire

Email seminars@maths.ucd.ie
Web maths.ucd.ie/seminars

Analysis Seminar

Juergen Mueller (University of Trier, Germany)

will speak on

Simultaneous Polynomial Approximation and Universality Properties of Taylor Series

Tue 26th March 2019 at 4:00PM

Location: Seminar Room SCN 1.25

Let $H(\Delta)$ denote the space of functions holomorphic in the unit disc Δ endowed with the topology of locally uniform convergence. It is known that for a residual set of functions in $H(\Delta)$ the partial sums of the Taylor series behave extremely erratic outside Δ . According to classical results, for functions in Banach spaces of holomorphic functions in Δ as for example the Hardy spaces or the Dirichlet space the situation is quite different. We show that, however, to a certain extent erratic behaviour still occurs. As a basic tool, results on simultaneous approximation by polynomials play a role.

This talk is part of the **Analysis** series. For more, see
<https://maths.ucd.ie/seminars>