Clifford Gilmore (UCC)

Dynamics of Weighted Composition Operators on Fock Spaces.

Linear dynamics has been a rapidly evolving area of research since the early 1990s. I will begin by introducing the notion of hypercyclicity and by recalling some basic examples to illustrate the dynamics of continuous linear operators in the setting of infinite-dimensional Hilbert/Banach spaces. On the other hand, the study of weighted composition operators acting on spaces of analytic functions has recently been the subject of much research activity. In particular, characterisations of the bounded and compact weighted composition operators acting on Fock spaces were identified by, amongst others, Ueki (2007), Le (2014), and Tien and Khoi (2019). In this talk I will examine some recent results that give explicit descriptions of bounded and compact weighted composition operators acting on Fock spaces. This allows us to prove that Fock spaces do not support supercyclic weighted composition operators.

This is joint work with Tom Carroll (UCC).