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Analytic structure of weighted shifts on directed trees

Abstract

The class of weighted shifts on directed trees generalizes classical weighted shifts. It was introduced a few years ago and provided a lot of examples of operators with interesting properties. In the talk I will concentrate on analytic properties of these operators. In particular, I will prove that a weighted shift on a directed tree is related to a multiplier algebra of coefficients of analytic functions. This result leads to a kind of functional calculus for functions from multiplier algebras. Furthermore, I will present some properties of the spectrum and bounded point evaluations of these operators.

The talk is based on a joint work with P. Budzyński and M. Ptak

Talk time: 2016-07-18 04:00 PM— 2016-07-18 04:20 PM Talk location: Cupples I Room 207