Model of operators and their characteristic functions

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Abstract

In this talk, using Sz.-Nagy and Foias isometric dilation, we will describe functional models of a class of operators. This will further lead us to define their characteristic functions which are complete unitary invariants. We will also discuss the connection between invariant subspace problem and factorization of characteristic functions. If time permits we will see a recently developed multivariate analogue of these notions.

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