

SPECTRAL PROPERTIES OF SELF-ADJOINT LINEAR OPERATORS

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ABSTRACT

The spectral theory mainly deals with a systemic study of inverse operators, their general properties and their relation to the original operators.

Operators on Hilbert space is a basis for a comprehensive study of the spectral theory. In particular, the hermitian or self-adjoint operators are very important in many applications. In this peper, we have generalized this idea by showing that the spectrum of a self-adjoint operator on a Hilbert space also consists entirely of real values.

KEYWORDS: Spectral Theory, Self Adjoint, Hilbert Space, Inverse Operator, Projection