

Spectral properties of selfadjoint exit space extensions via Weyl functions

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joint work with M. Malamud

Spectral properties of selfadjoint extensions in exit spaces are studied for symmetric operators in a Hilbert space with arbitrary defect numbers (n, n) , $n \leq \infty$. The derivation of the main results rely on the notions of boundary relations and their Weyl families introduced in [1], and the general coupling technique developed very recently in [2, 3]. The general version of the coupling method needed here is a geometric approach for constructing exit space extensions for generalized resolvent and it provides an effective tool for studying spectral properties of selfadjoint exit space extensions via associated Weyl functions and their limiting behavior at the spectral points lying on the real axis.

References

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