



## SPECTRAL THEORY OF NON-SELFADJOINT OPERATORS VIA BOUNDARY TRIPLETS

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We consider generalisations of Dirichlet-to-Neumann operators (M-functions) for non-selfadjoint operators in an abstract setting. The aim is to use the theory of boundary triplets for non-selfadjoint operators to generalise as much as possible of the classical theory of the Weyl-Titchmarsh  $m$ -function for the Sturm Liouville problem on a half-line to a more general setting which includes elliptic PDEs. We prove that in our setting isolated eigenvalues of an operator correspond to poles of the associated M-function and discuss problems and partial results on identifying the essential spectrum via the M-function.