

M-functions for closed extensions of adjoint pairs of operators

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joint work with M.B. Brown, G. Grubb, J. Hinchcliffe,
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We consider the generalisation of the Weyl m -function from Sturm-Liouville problems and the Dirichlet-to-Neumann map from PDEs to the setting of adjoint pairs of operators. We show that in this setting every closed extension of a minimal operator is associated with an abstract M -function and discuss spectral properties of the extension via the M -function. The results can be applied to elliptic PDEs.