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**Rudi Weikard\*** ([weikard@uab.edu](mailto:weikard@uab.edu)). *On the spectral theory for first-order systems without the unique continuation property.*

We consider the differential equation  $Ju' + qu = wf$  on the real interval  $(a, b)$  when  $J$  is a constant, invertible skew-Hermitian matrix and  $q$  and  $w$  are matrices whose entries are distributions of order zero with  $q$  Hermitian and  $w$  non-negative. In this situation, it may happen that there is no existence and uniqueness theorem for balanced solutions of a given initial value problem. After describing the set of solutions the equation does have we establish that the adjoint of the minimal operator is the maximal operator, investigate deficiency indices, describe all self-adjoint extensions of the minimal operator, and establish the existence of Green's function.

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