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Casey Lynn Johnson* (calyjo99@gmail.com). *Sturm-Liouville Problems with Eigenvalue-Dependent Boundary Conditions*. Preliminary report.

Sturm-Liouville problems with eigenvalue-dependent boundary conditions originate from self-adjoint expansions of non-densely defined symmetric operators. These self-adjoint expansions can be defined in terms of a coupling of the boundary spaces of two symmetric operators. Properties of Nevanlinna-Pick functions are applied to study distribution of eigenvalues. Green's functions are constructed for various examples of the operators coupling. (Received September 25, 2017)