

# Trace formulas and inverse spectral theory for strings

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Generalized indefinite strings provide a canonical model for self-adjoint operators with simple spectrum (other classical models are Jacobi matrices, Krein strings and  $2 \times 2$  canonical systems). We'll present several Szego-type theorems for generalized indefinite strings and related spectral problems (including Krein strings and Dirac operators). More specifically, for several classes of coefficients (that can be regarded as Hilbert-Schmidt perturbations of model problems), we provide a complete characterization of the corresponding set of spectral measures. The talk is based on joint work with J.Eckhardt.