

Once more about models for generalized Nevanlinna functions

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As it is well known a scalar generalized Nevanlinna function $Q \in \mathcal{N}_\kappa$ has a realization

$$Q(z) = Q(\bar{z}_0) + (z - \bar{z}_0)[(I - (z - z_0)(A - z)^{-1})v, v]$$

with a self adjoint linear relation A in a Pontryagin space. Recently V.Derkach and S.Hassi and also A.Dijksma, H.Langer, A.Luger, and Y.Shondin have given models for such realizations using reproducing kernel Pontryagin spaces.

Based on these results we present the model in an even more explicit form, in particular we focus on several special cases.