

Closely connected unitary realizations of the solutions to the basic interpolation problem for generalized Schur functions

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A generalized Schur function which is holomorphic at $z = 0$ can be written as the characteristic function of a closely connected unitary colligation with a Pontryagin state space. We construct a closely connected unitary colligation of the solution $s(z)$ of the basic interpolation problem for generalized Schur functions in terms of the canonical unitary colligation of the corresponding parameter function and the interpolation data. If time permits we shall also show how the canonical unitary realization of the parameter function can be recovered from this closely connected unitary realization of the solution.