

Operator Theory and Machine Learning

Topics of a solvability theory of a class of singular integral operators

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We will consider a class of paired integral operators with rational coefficients and linear-fractional Carleman shift, on the unit circle. As is known, the invertibility conditions of these operators are related to the factorization of a matrix functions. For this class of operators, the invertibility conditions not only depend on the partial indices of the respective matrix function, but they also depend on a constant which is a root of the unit. Some useful examples will be provided.

References

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