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Section:

8. Analysis

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Strauss, Vladimir, USB, Caracas, Venezuela & SUSU, Chelyabinsk, Russia
On a model representation for a normal operator in Krein space
The present report is devoted to a functional model representation of a *normal operator* N acting in a *Krein space*. We suppose that N and its adjoint operator $N^{[*]}$ have a common invariant subspace L^{+} which is a maximal nonnegative subspace that can be represented as a direct sum of a finite-dimensional neutral subspace and a uniformly positive subspace. We construct for N a model representation as the operator of multiplication by the independent variable acting in some functional space.
Reference: Azizov, T. Ya and Iokhvidov, I. S. Linear Operators in Spaces with Indefinite Metric, Wiley, New York, 1989.