\( \alpha \)–FREDHOLM OPERATORS RELATIVE TO INVARIANT SUBSPACES

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Abstract. Let \( T \) be a bounded linear operator on a Hilbert space \( H \) and let \( W \) be a closed \( T \)–invariant subspace of \( H \). Then \( T \) has a matrix representation on the space \( W \oplus W^\perp \) by
\[
T = \begin{bmatrix}
A & C \\
0 & B
\end{bmatrix}.
\]
In this paper, the relationships between the \( \alpha \)–Fredholm properties of \( T \) and those of the pair of operators \( A \) and \( B \) are studied.


Keywords and phrases: \( \alpha \)–closed subspaces, \( \alpha \)–Fredholm operators, invariant subspaces.

REFERENCES