

SOME SPECTRAL PROPERTIES OF THE NON-SELF-ADJOINT
FRIEDRICHS MODEL OPERATOR

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To Katusha with love

ABSTRACT

A non-self-adjoint, rank-one Friedrichs model operator in $L_2(\mathbb{R})$ is considered in the case where the determinant of perturbation is an outer function in the half-planes \mathbb{C}_\pm . Its spectral structure is investigated. The impact of the linear resolvent growth condition on its spectral properties (including the similarity problem) is studied.