

FREDHOLM ANALYTIC THEOREM ON THE BOUNDARY OF A DOMAIN AND ITS APPLICATION TO PERTURBATION THEORY

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The Fredholm Analytic Theorem is a standard instrument of the spectral analysis having numerous applications. Its main field is the perturbation of the discrete spectra. For the purposes of the continuous spectra perturbation (say in scattering theory) one needs to apply a version of the Fredholm Analytic Theorem where the invertibility is investigated on the boundary of a domain (for example on the real axis in case of the upper half-plane). We present some “boundary” version of the theorem. Applications to the scattering theory are considered.