CONVOLUTION TYPE OPERATORS WITH OSCILLATING SYMBOLS ON WEIGHTED LEBESGUE SPACES ON A UNION OF INTERVALS

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Abstract. We establish Fredholm criteria for convolution type operators $W$ with oscillating symbols, continuous on $\mathbb{R}$ and admitting mixed (slowly oscillating and semi-almost periodic) discontinuities at $\pm \infty$, on weighted Lebesgue spaces on a union of intervals with weights in a subclass of Muckenhoupt weights.

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Key words. Convolution type operator, Wiener-Hopf operator, Muckenhoupt weight, weighted Lebesgue space, slowly oscillating and semi-almost periodic matrix functions, local principle, symbol, Fredholmness.

REFERENCES


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