Riemann-Hilbert problems in Hardy spaces

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Abstract:

We consider the (non)existence of solutions of the Riemann-Hilbert problem in Hardy spaces, and show how the behavior of the symbol near its zeros affects the existence of solutions. We mainly focus on the class of scalar-valued continuous symbols, but may also mention other classes of (matrix-valued) symbols. Some applications to spectral theory of Toeplitz operators and hydrodynamics will also be mentioned.

References:
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