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Grupo de Análise Funcional e Aplicações
Functional Analysis and Applications Group

Factorization and maximal functions of Toeplitz kernels

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Abstract

Factorization techniques are powerful tools for solving problems by reducing them to simpler ones, much like polynomial factorization helps find roots or matrix factorization aids in solving systems of linear equations. When studying Toeplitz operators, factorizations such as the Wiener-Hopf factorization provide insights into invertibility, Fredholm properties, kernels, cokernels, and even left/right regularizers. However, many Toeplitz operators cannot be analyzed using Wiener-Hopf factorization. Therefore, we explore alternative methods to characterize Toeplitz kernels, including different types of factorizations, multipliers onto simpler spaces, and maximal functions.

Room 11.2.21
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