



Seminar

Systems and Control Group - CIDMA

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Departamento de Matemática, Universidade de Aveiro
Sala 11.3.21

Weighted norm inequalities for fractional integral with
general analytic kernels

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Abstract

The aims of this talk is to characterize weight functions $w(x)$ for which the fractional integral operator with general analytic kernels of order $\alpha > 0$, is bounded from $L^p(w^p dx)$ to $L^q(w^q dx)$, $1 < p < 1/\alpha$, $1/q = 1/p - \alpha$, are characterized. The method involves the use of complex interpolation of analytic families of operators to obtain similar results for fractional "one-sided" maximal function operators associated to this fractional integral with general analytic kernels.

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