BILINEAR LITTLEWOOD-PALEY FOR CIRCLE AND TRANSFERENCE

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Abstract

In this paper we have obtained the boundedness of bilinear Littlewood-Paley operators on the circle group $\mathbb{T}$ by using appropriate transference techniques. In particular, bilinear analogue of Carleson's Littlewood-Paley result for all possible indices has been obtained. Also, we prove some bilinear analogues of de Leeuw's results concerning multipliers of $\mathbb{R}^n$.