

April 13, 12:00 – 13:00

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REPRESENTATION FORMULA OF BILINEAR BI-PARAMETER SINGULAR INTEGRAL OPERATORS

We represent bilinear bi-parameter singular integral operators by three type of model operators, shifts, partial paraproducts and full paraproducts. As a corollary, we prove full range of the unweighted boundedness of bilinear bi-parameter singular integral operators. Weighted boundedness is also obtained when T is full paraproduct free (i.e., in the representation formula, there is no full paraproduct term)