

Title: On the maximal operator of the Marcinkiewicz–Fejér means of double Walsh–Kaczmarz-Fourier series

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In the paper [3] we proved that the maximal operator of the Marcinkiewicz–Fejér means of the 2-dimensional Fourier series with respect to the Walsh–Kaczmarz system is not bounded from the Hardy space $H_{2/3}$ to the space $L_{2/3}$. Now, in this paper we prove a stronger result, that is there exists a martingale $f \in H_{2/3}$ such that the maximal Marcinkiewicz–Fejér operator with respect to Walsh–Kaczmarz system does not belong to the space $L_{2/3}$.

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