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ON THE MAXIMAL OPERATORS OF VILENKIN–FEJÉR MEANS ON HARDY SPACES

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Abstract. The main aim of this paper is to prove that when $0 < p < 1/2$ the maximal operator $\widetilde{\sigma}^{*}_{p} f := \sup_{n\in\mathbb{N}} \frac{|\sigma_n f|}{(n+1)^{1/p-2}}$ is bounded from the martingale Hardy space H_p to the space L_p, where σ_n is n-th Fejér mean with respect to bounded Vilenkin system.

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