

MAXIMAL OPERATORS ON VILENKIN SYSTEMS

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ABSTRACT. The aim of this lecture is to summarize results of the last years of research with respect to boundedness of maximal operators of Fejér and Marcinkiewicz-Fejér means.

We managed to prove that the maximal operator $\sigma_0^* := \sup_n |\sigma_n|$ of the Fejér means of the Vilenkin-Fourier series is not bounded from the Hardy space $H_{1/2}$ to the space $L_{1/2}$. We observed similar statements (boundedness from $H_{1/2}$ to $L_{1/2}$ and to weak- $L_{1/2}$) with respect to the double Vilenkin-Fourier series and to the so-called Marcinkiewicz-Fejér means, too.

REFERENCES

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