

On the Cesàro means of Walsh-Fourier series

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This lecture is devoted to review Cesàro means (C, α) ($0 < \alpha \leq 1$) on the Hardy spaces H_p , when $0 < \alpha \leq 1/(1 + \alpha)$.

In the talk will be presented the boundedness of subsequences of Fejér means $(C, 1)$ of Walsh-Fourier series on the Hardy spaces, when $0 < p \leq 1/2$.

Moreover, by applying above mentioned results we derive necessary and sufficient conditions for the modulus of continuity of Hardy spaces, for which Fejér means $(C, 1)$ convergence on the Hardy spaces H_p , when $0 < p \leq 1/2$.

Furthermore, we present some strong convergence theorems of Cesàro means (C, α) ($0 < \alpha \leq 1$) on the Hardy spaces H_p , when $0 < p \leq 1/(1 + \alpha)$.