On the absolute convergence of general Fourier series

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Abstract. It is known that the Fourier series of functions of the Lipschitz class for classical orthonormal systems (ONS) (trigonometric, Haar, Walsh, etc.) are absolutely convergent. However, for general ONS, this fact, in general, does not hold. In the present paper, we find the conditions on the functions of an ONS under which the special series of Fourier coefficients of functions from the Lipshitz class are absolutely convergent. It is established that the resulting conditions are the best possible in a certain sense.

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