

SOME IMPROPER INTEGRALS INVOLVING THE SQUARE OF THE TAIL OF THE SINE AND COSINE FUNCTIONS

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Abstract. A class of four improper integrals containing the square of the tail of the sine and cosine functions in their integrand are found using Fourier transform methods. Relations between the four improper integrals considered are given and an open problem concerning the general form of certain improper integrals of this type is raised.

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