

**WEIGHTED ONE-SIDED APPROXIMATION OF CHARACTERISTIC
FUNCTIONS OF INTERVALS BY POLYNOMIALS ON A CLOSED INTERVAL****A. G. Babenko, M. V. Deikalova, Sz. G. Revesz**

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We consider the problem of weighted one-sided approximation on the interval $[-1, 1]$ of characteristic functions of intervals $(a, 1] \subset (-1, 1)$ and $(a, b) \subset (-1, 1)$ by algebraic polynomials. In the case of half-intervals, the problem is solved completely. We construct an example to illustrate difficulties arising in the case of an open interval.

Keywords: one-sided approximation, characteristic function, polynomials.

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