Qualitative results on the convergence of the q-Bernstein polynomials

SOFIYA OSTROVSKA and MEHMET TURAN

ABSTRACT.

Despite many common features, the convergence properties of the Bernstein and the q-Bernstein polynomials are not alike. What is more, the cases $0 < q < 1$ and $q > 1$ are not similar to each other in terms of convergence. In this work, new results demonstrating the striking differences which may occur in those convergence properties are presented.

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DEPARTMENT OF MATHEMATICS
ATILIM UNIVERSITY
INCEK, 06836 ANKARA, TURKEY
E-mail address: ostrovsk@atilim.edu.tr
E-mail address: mturan@atilim.edu.tr