

AN INTERPOLATION PROCESS ON THE ROOTS OF LAGUERRE POLYNOMIALS WITH AN ADDITIONAL CONDITION

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Abstract. This paper is devoted to studying a Pál-type interpolation problem on the zeros of Laguerre polynomials of degree n and its derivative of degree $n - 1$. Here, we work on an interpolation on the polynomials with an additional condition on the zeros of Laguerre polynomials. The mixed type interpolation problem is studied in a unified way. The aim of this paper is to consider a special problem of mixed type $(0;0,1)$ -interpolation on the zeros of Laguerre polynomials. In this paper we prove the regularity of the problem and determine explicit formulae of the interpolation. Under certain conditions, we obtain an estimate over the nonnegative real number line.

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