

**POLYNOMIAL INEQUALITIES, FUNCTIONAL SPACES AND BEST APPROXIMATION ON
THE REAL SEMIAXIS WITH LAGUERRE WEIGHTS.***

G. MASTROIANNI †

Abstract. This is a short survey on polynomial approximation with Laguerre weights. Some new polynomial inequalities are presented.

Key words. Orthogonal polynomials, polynomial inequalities, Fourier series, Lagrange interpolation.

AMS subject classifications. 41A10, 26D05.

*Received October 31, 2000. Accepted for publication February 2001. Communicated by Sven Ehrlich.

†Dipartimento di Matematica, Università della Basilicata, C/da Macchia Romana, 85100 Potenza, Italy. This work is supported by a contribution GNIM-INDAM.