

WEIGHTED POLYNOMIAL APPROXIMATION

G. Mastroianni,

Department of Mathematics and Computer Science

University of Basilicata

V.le dell'Ateneo Lucano 10, Potenza, Italy

`giuseppe.mastroianni@unibas.it`

The approximation of functions having singularities at the endpoints of the definition domain (one-dimensional, bounded and/or unbounded) naturally leads to the weighted polynomial approximation.

In this talk I want to discuss about some recent results concerning the exponential weights: polynomial inequalities, best approximation estimates, Fourier sums and Lagrange interpolation.