WEIGHTED POLYNOMIAL APPROXIMATION ON $(0, +\infty)$ BY DE LA VALLÉE POUSSIN MEANS

D. Occorsio and W. Themistoclakis
Department of Mathematics, Computer Science and Economics,
University of Basilicata
Potenza, Italy
donatella.occorsio@unibas.it

The talk deals with the construction of certain de la Vallèe Poussin type means on $(0, +\infty)$, obtained as the discretization of delayed arithmetic means of Fourier partial sums. We prove that in suitable weighted spaces of functions the norms of such operators are bounded. A comparison with Lagrange interpolating polynomial sequence is shown. Some numerical tests are proposed to confirm the theoretical results.