

Rendiconti del Circolo Matematico di Palermo

Volume 74 Number 2 2025

Singha, N.K., Chanam, B.:

New integral extensions of Ankeny and Rivlin's inequality for the derivatives of the polynomial 78

Pramanik, D.C., Sarkar, A.:

An entire function weakly sharing a doubleton with its c -shift 79

Moschetti, R., Pirola, G.P., Stoppino, L.:

Correction: Pencils of plane cubics with one base point 80

Guennach, N., Mahdou, N., Riffi, A.:

Graded Prüfer rings 81

Sitthithakerngkiet, K., ur Rehman, H., Argyros, I.K., Seangwattana, T.:

Strong convergence of dual inertial fixed point algorithms for computing fixed points over the solution set of a variational inequality problem in real Hilbert spaces 82

Ye, Y., Chang, S.:

Existence and blow-up of solutions for higher-order Kirchhoff-type equation 83

Dimca, A., Sticlaru, G.:

Curves with Jacobian syzygies of the same degree 84

Nonato, C.A.S., Nascimento, F.A.F., Santos, M.J.D., Costa, A.L.A.:

Swelling porous elastic soils with fluid saturation and delay term in the internal feedback 85

Keywords Polynomial · Zero · Maximum modulus · $s^{(k)}$ derivative · Integral inequality · Simpson's $\frac{1}{3}$ rule

Mathematics Subject Classification 30A10 · 30C10 · 30C15

1 Introduction

Approximation by polynomials is a fundamental concept in mathematics and applied sciences, offering a versatile tool for representing complex functions with simpler polynomial expressions. This approach involves the construction of polynomial functions that closely approximate the target function, facilitating easier analysis, computation, and visualization in various domains. Polynomial approximation plays a pivotal role in

Further articles can be found at link.springer.com

Instructions for Authors for *Rend. Circ. Mat. Palermo* are available at www.springer.com/12215

Indexed in Google Scholar, MathSciNet, Mathematical Reviews, Zentralblatt Math, and Web of Science

74(2) 1–138 March 2025

© The Author(s) 2025. National Institute of Technology Manipal, Bengal 795004, India