

On “truncated” quadrature rules

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Abstract

In the book *Recent Trends in Numerical Analysis* edited by Prof. Donato Trigiane and dedicated to Prof. Ilio Galligani, a convergence theorem of a “truncated” Gaussian rule based on Laguerre zeros was proved [2].

In these last years this procedure has been extended in several directions and the underlying theory has been deepened [1].

In this talk we will discuss new results and numerical advantages of “truncated” quadrature rules related to different weight functions.

References

1. P. Junghanns, G. Mastroianni, I. Notarangelo. *Weighted Polynomial Approximation and Numerical Methods for Integral Equations*, Pathways in Mathematics, Birkhäuser Basel, 2021.
2. G. Mastroianni, G. Monegato. Truncated Gauss-Laguerre quadrature rules, in: *Recent Trends in Numerical Analysis* (D. Trigiane Ed.), Nova Science Publishers, 2000, pp. 213–221.

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