

Error bounds of certain Gaussian quadrature formulae

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For analytic functions we study the kernel of the remainder term of Gauss quadrature rules with respect to one class of Bernstein-Szegö weight functions. The location on the elliptic contours where the modulus of the kernel attains its maximum value is investigated. This leads to effective error bounds of the corresponding Gauss quadratures.

Keywords: Approximation and interpolation, Quadrature and integral equations.

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