Anti-Gaussian quadrature rules for the optimal set of quadrature rules in Borges' sense

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Abstract

Anti-Gaussian quadrature rules, introduced by Laurie in [1], have the property that their error is equal in magnitude but of the opposite sign to the corresponding Gaussian quadrature rules. Guided by that idea, we define and analyse anti-Gaussian quadrature rules for the optimal set of quadrature rules in Borges' sense (see [2]), with respect to the set of r different weight functions. Also, we introduce the set of averaged quadrature rules and give some numerical examples.

Keywords: Anti-Gaussian quadratures, Optimal set of quadrature rules in Borges' sense, Weight function

References

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