

# Internality of truncated generalized averaged Gaussian quadratures

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## Abstract

Generalized averaged Gaussian quadrature formulas, introduced by Spalević [3], may yield a smaller error than Gauss quadrature rules. When moments or modified moments are difficult to compute, these formulas can serve as good substitutes. However, generalized averaged Gaussian quadrature formulas may have external nodes, i.e. nodes outside the convex hull of the measure corresponding to the Gauss rules. This would make them unusable when the domain of the integrand is limited to this convex hull. In this paper we investigate whether removing some of the last rows and columns of the matrices determining generalized averaged Gaussian quadrature rules (cf. [2]) will produce quadrature rules with no external nodes. The results that will be presented have been recently published in [1].

**Keywords:** Truncated averaged Gaussian quadratures, Internality

## References

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