

COMPUTATION OF GAUSS-KRONROD QUADRATURE RULES WITH NON-POSITIVE WEIGHTS*

G. S. AMMAR [†], D. CALVETTI [‡], AND L. REICHEL [§]

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Abstract. Recently Laurie presented a fast algorithm for the computation of $(2n + 1)$ -point Gauss-Kronrod quadrature rules with real nodes and positive weights. We describe modifications of this algorithm that allow the computation of Gauss-Kronrod quadrature rules with complex conjugate nodes and weights or with real nodes and positive and negative weights.

Key words. orthogonal polynomials, indefinite measure, fast algorithm, inverse eigenvalue problem.

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[†]Department of Mathematical Sciences, Northern Illinois University, DeKalb, IL 60115. (amar@math.niu.edu).

[‡]Department of Mathematics, Case Western Reserve University, Cleveland, OH 44106. (dxc57@po.cwru.edu). Research supported in part by NSF grant DMS-9806702.

[§]Department of Mathematics and Computer Science, Kent State University, Kent, OH 44242. (reichel@mcs.kent.edu). Research supported in part by NSF grant DMS-9806413.