ANTI-GAUSS-TYPE QUADRATURE RULES

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Pairs of Gauss and anti-Gauss quadrature rules can be used to estimate the error in Gauss rules. Anti-Gauss rules were proposed by Laurie for nonnegative real measures on the real line. This talk reviews generalizations and simplifications of these rules, as well as extensions to matrix-values measures. Also anti-Gauss-type quadrature rules associated with multiple orthogonal polynomials will be described. Applications to network analysis will be discussed. This talk presents joint work with H. Alqahtani, C. Fenu, D. Martin, M. Pranić, and G. Rodriguez.