A TOTAL POSITIVITY PROPERTY OF THE MARCHENKO-PASTUR LAW*

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Abstract. A property of the Marchenko-Pastur measure related to total positivity is presented. The theoretical results are applied to the accurate computation of the roots of the corresponding orthogonal polynomials, an important issue in the construction of Gaussian quadrature formulas.

Key words. Total positivity, Marchenko-Pastur law, High relative accuracy, Jacobi matrix, Eigenvalue computation.

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