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ON AN EXTENDED HADAMARD MAXIMUM DETERMINANT PROBLEM

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Abstract. Motivated by the Hadamard maximum determinant problem we study the quantities $a_{m,n} = \max \det(AA^T)$ where A is a $m \times n$ matrix with entries 1 and -1. We find the exact values of $a_{2,n}$ and $a_{3,n}$ and for a general m we give upper and lower bounds for $a_{m,n}$.

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