

1046-15-708

Adam H Berliner* (berliner@math.wisc.edu), Van Vleck Hall, 480 Lincoln Dr., Madison, WI 53706. *On m -convertible matrices*. Preliminary report.

If B is a $(0, 1, -1)$ -matrix for which there is a nonzero term in the classical determinant expansion and each nonzero term has the same sign then B is called *sign-nonsingular* and $A = |B|$ is called *convertible*. These matrices have been studied extensively in the literature. In this talk we will explore properties of certain types of convertible matrices and the notion of m -convertibility. That is, when is it possible to write $\text{per}(A)$ as the sum of determinants of signings of A in such a way that results in an algebraic identity? (Received September 10, 2008)